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THE LATE SIR ASUTOSH MOOKERJEE*

By

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We meet this evening in memory of the occasion of the death of the late Sir Asutosh Mookerjee who breathed his last this day fifteen years ago. Born in the early morning of the 29th of June in the year 1864 at a period when the social and political life of India was shaken to its very foundations as a result of the great Mutiny, Sir Asutosh passed his early life and career at a critical period of the history of India. He had his early lessons as a student of the South Suburban School under a famous scholar—the late Pundit Sib Nath Sastri—and was for some time under the private tuition of Srijut Madhusudan Das, M.A., B.L., C.I.E., later the distinguished Minister of the province of Bihar and Orissa. He had seen the late Pundit Iswarchandra Vidyasagar at the height of his fame. In college days he had his education under some of the distinguished professors of the time—one of them being Professor Booth, whose scholarship and erudition in Mathematics is still remembered in academic circles. After taking his degree in Arts and in Law he was articled to the world-renowned jurist, the late Sir Rashbehary

* Delivered on the occasion of the 15th Death Anniversary of the late Sir Asutosh Mookerjee at the Darbhanga Building, Calcutta, on 25th May, 1939.

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Ghose. He enrolled himself as a Vakil in the year 1888. Appointed a Fellow of the Calcutta University in the same year, he was elected as a Syndic of the University towards the end of the year, then a young man of only 24 years. He had created by that time a name for himself for his erudition and scholarship. In 1892, he moved his famous resolution in the Senate of the Calcutta University for the adoption of Bengali language and literature as a subject for all examinations up to the M.A. standard, but was defeated at the time. In 1899, he became a member of the Bengal Legislative Council and in 1901, a member of the Imperial Legislative Council. In 1904, he was co-opted a member of the Indian Universities Commission presided over by the Hon'ble Mr. Raleigh. In agreement with the policy of reforms visualised by Lord Curzon he threw himself whole-heartedly into the reform of the Calcutta University, even though the measures proposed were then opposed by the public in general led by the late Mr. Gopal Krishna Gokhale, another distinguished Indian leader of world-wide reputation. It was a singular trait in the life and character of Sir Asutosh that he was never daunted by fear or frown from any quarter; he never hesitated to face the consequences of his vision or to stand against public fury if he thought himself to be in the right. Criticism and agitation that the University reforms were intended to cripple the University life did not appeal to him; possibly he was then dreaming the future and planning his model. A great man hardly ever quarrels with his opponents or with his tools. Wherever he may be, he utilises his opportunities and shapes and formulates his schemes accordingly. Sir Asutosh was a member of the Committee to draft the original Regulations under the new Calcutta University Act which came into force soon after 1904. About this time he was called upon to be a judge of the

Calcutta High Court. Soon after, he was appointed the Vice-Chancellor of the University of Calcutta. Modern Bengal knows full well about his activities since he came to be the Vice-Chancellor; and how he almost entirely moulded and gave effect to the new Regulations is a matter still too near to us to be forgotten by anybody. A Fellow and a Syndic of this University from 1888, called upon by His Excellency Lord Minto to be its Vice-Chancellor in 1906, Sir Asutosh served the University and the cause of education till the end of his life, and even though he ceased for a time to be the Vice-Chancellor he was a force to reckon with: he shaped, cut and chiselled as he liked. A genius or a patriot never loses anything. A great man hardly suffers by comparison even if he is placed in what we might say a humbler rank; he never waits for a place. Sir Asutosh, even when he ceased to be the Vice-Chancellor of this University for a time, did not suffer in any way in reputation nor did he fly away from the battle of life even though he had to sit as an Ordinary Fellow of the University. His interest and work retained the same strength and vigour. Once again, during the waves of the Non-Co-operation Movement, when the student community was almost going to be swept off its feet and the whole country was seething with other feelings, he was called upon to take the office of the Vice-Chancellor and he never hesitated to raise his trumpet voice against any inroad within the sacred precincts of the University. His clarion call to the students left the University safe. Once again he demonstrated to the public that when occasions demanded he would not hesitate to stand against the popular ebullitions and outbursts of feelings. He always called a spade a spade and stood by its consequences. In his address to the members of the Lucknow University Union almost

a year before he breathed his last he spoke with emphasis :

" Let me pass on to a line of argument, which I am free to admit did not appeal to me. That argument took this force : the bureaucracy which we have been accustomed to meet has been composed of foreigners and consequently bureaucracy is bad. The democracy which we have now to face consists of our countrymen and consequently democracy is good. We Indians are all good—foreigners are all bad. It will take me a long time to convince myself that this is the whole truth and nothing but the truth."

As I have said before it is yet too early to appraise properly all that has been done by Sir Asutosh in the various domains of our intellectual and educational life and particularly in the University life of the province. We are still too near the scene to judge him in a dispassionate manner which is very much necessary for a true historical perspective, but whatever might be the future of the province, whatever might be the future developments of the University of Calcutta or of its educational institutions, Sir Asutosh's name will go down to posterity as one single man who made the University of Calcutta what it is now and will possibly be for many years to come. The fullest expansion of the University as dreamt by him has not yet materialised. If by the grace of God a day ever comes when the University of Calcutta attains its fullest expression, it will be the realisation of the dream dreamt by this great soul. It was he who conceived, planned, regulated and measured his great work. I mean no disparagement or disrespect to those who have worked after him or who are still working or may work in the future. I mean no exaggeration and no overestimate that possibly for many years to come the Calcutta University

will bear the impress of the crucible designed by Sir Asutosh.

Presiding over the condolence meeting of the Senate Lord Lytton spoke of this great man as one "who in the eyes of the world represented the University so completely that for many years Sir Asutosh was in fact the University and the University was Sir Asutosh." In paying our homage to such a man, we honour ourselves. Flowers, as was said by Sir Ewart Greaves, will fall and fade and we who stand here will pass away but his memory will remain. I look forward to the present generation of students getting all the best inspirations and ideals from the life history of this great man. Long after we are dead and gone, the sacred memories of this man, his ideals, his inspirations and his works will remain as the model for the guidance of the future generations of students.

I consider myself honoured and fortunate in associating myself with the ceremony of this evening—a ceremony which behind its flowers and garlands intends to preserve the memory of this great man. Twenty-two long years have rolled by but I still feel as if it were only yesterday when I was sitting on the bench of the University Law College, as its student in the law classes and attending the lecture delivered in a stentorian voice by Sir Asutosh in the Moot Court classes. Amidst pin-drop silence in a class of about five hundred I almost hear his lucid, clear and brilliant exposition of the Law of Mortgage. I still feel the marvel at the lucidity with which this most intricate subject was being exposed before ourselves in a most simple language. I almost remember his exhortation to the students towards the conclusion of his lecture, when quoting the precedence of Harvard, he hoped for a day when his students might be leaders of thought

and action in every walk of life. Later in my University life while a post-graduate student, I was about to be cut off from the University of Calcutta on the ground that I had been joining political movements, when I was elected the Assistant Secretary of the Bengal Muslim League. Nervous, anxious and worried, I approached this great man and I was encouraged with his usual sympathy for students, and I never heard again about the matter.

I, therefore, join to-day whole-heartedly in the functions of this evening when the memory of this great man is remembered. Amidst the hard problems of life and in the glamour of surroundings, we are apt to forget the debt we owe to our ancestors and to our past history. In keeping the memory of this great man we preserve a noble example of heroic pursuit after an ideal. We also project an inspiration, a model and an example before the rising student community. No other province in India can boast of that strong unity between the people and its University life. The University of Calcutta is now intimately connected with the intellectual life of Bengal. We have not yet reached, as I have said before, the fullness of its expansion. If the expansion comes, I am sure it will be by our following in the footsteps of a great man who was a devoted and ardent nationalist and a patriot in the true sense of the term—a world-renowned jurist and an educationist of the highest order—and above all, a typical Bengalee.

The University in all its branches and in every department still bears the stamp of his word and his individuality. He saw "on all sides the unmistakable signs of pulsation of new life,

of new hopes, of new aspirations in all spheres of human activities." In his unbounded enthusiasm for the University interests, he expressed himself in the following words :—

"Dynasties may come and go, political parties may rise or fall, the influence of men may change, but the Universities go on for ever as seats of truth and power, as free fountains of living water, as undefiled altars of inviolate truth. Your University—my University—will go on for ever."

In bringing this function to a close, I cannot do better than quote another famous extract that sets up his ideals :

"But in whatever sphere your lot may be cast, whatever your hopes and fears, turn back to your *Alma Mater* with filial piety and attachment. Councils will come and go, Ministers will blossom and perish, parties will develop and disappear or change their nature and survive. But your University, my University, will live on for ever, if her children by thousands and ten thousands stand by her with steadfast loyalty and devotion alike in her days of triumph and affliction. Unalterable is my faith as to her bright future, because I feel she must be a national organisation, self-reliant though bound in service to the nation, adapting herself to the manifold and varying wants of the community from generation to generation. I call upon you, Fellow Graduates, to join with me in the words of the warrior poet, in a solemn pledge of eternal devotion to the spirit of our Motherland, the protecting divinity of our *Alma Mater*."

On this occasion and at this moment when the day is slowly passing into the evening and the sun is going below the horizon but to brighten another

hemisphere, let us meet together in all sincerity and purity to pay our homage to this great departed soul, now lying in eternal peace, but whose ideal is still invigorating the life of this University and is even giving rise to newer pulsations and movements, but in the great path chalked out by him decades back.

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THE

CALCUTTA REVIEW

JULY, 1939

CHEMICAL WARFARE*

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FROM the dawn of antiquity up to the initial phases of the last Great War, men have fought their battles by physical blows. A new era dawned in the history of warfare, when firearms were invented in the middle ages which enabled soldiers to strike fatal blows from a distance. The attention lavished upon various types of guns has made the fire power of these weapons so great that modern armies are forced to seek protection in trenches, deep and strong, so that tactical movement in a war between first class powers becomes eventually paralysed. The battlefront in the West in 1915 extended from the Swiss mountains to the sea. The British fleet were effectively preventing the entry of essential raw materials into Germany. In their desperate attempt to break through this cordon in land and sea, the German High Command decided to launch indiscriminate submarine attack at sea and chemical warfare on land.

* Report of a Lecture at the Rotary Club, Calcutta, on May 16, 1939.

It was hoped that by the use of toxic chemicals, movement would be restored in battle, and thus again permit tactical manœuvre and fire power to open the way to victory. Germany was in a specially favourable position to initiate this new kind of warfare. Her basic chemical industries were in a position to manufacture acids, alkalies and chlorine in unlimited quantities; while her fine chemical industry could easily produce, in tons, any chemical of great military value. The novelty of chemical warfare consists in the fact that the chemicals pervade the atmosphere over an area. When a high explosive shell bursts, a flying fragment may kill a soldier, but his comrade, standing by, may escape unhurt. But when poison gas is released, every one within its compass becomes equally exposed to its effect. A hastily dug hole may afford shelter from machine gun bullets ; a copse of trees may protect a company from artillery fire. But in gas warfare, the molecules themselves are the fatal bullets which permeate the air, overcome all obstacles of terrain and stalk their quarry relentlessly.

The effect of the first gas attack at Ypres on 22nd April, 1915, has thus been described by Sir John French :—

" Aircraft reported that thick yellow smoke had been seen issuing from the enemy trenches. What followed almost defies description. The effect of these poison gases was so virulent that the whole of the line held by the Division became incapable of any action at all. Thousands of men were thrown into a comatose and dying condition, and within an hour, the whole line had to be abandoned with about 50 guns."

The poison gases can generally be compressed into the liquid state. Into thin shells are charged these liquids which, by the use of a small amount of high explosive in the shell, are converted into fine mist when the shells burst. Since gases can diffuse into a wide area, the gas shells need not be fired from guns with the same accuracy of aim as high explosive shells. Guns of simple mechanical design could be used. These shells proved so effective that, in the last phase of the Great War, about 50% of the shells fired were gas shells.

The combination of poison gases with aircraft is responsible for a new type of warfare almost as revolutionary in nature as the introduction of firearms in the middle ages. The actual hostilities need no longer be confined to the battlefront alone ; the extensive use of poison gas and incendiary bombs against civilian population has now

become common practice. Italy won the war in Abyssinia chiefly with the aid of this weapon. They say that Germany had no difficulty in swallowing up Czeckoslovakia because of the terror inspired in her neighbours by her air power. Britain no longer enjoys the immunity from attack which was her greatest asset for centuries; and new methods of defence including conscription are being hastily evolved. The cruising distance of aeroplanes is rapidly increasing and destruction of enemy headquarters even at a distance of 2,500 miles is not outside the range of probability. Air raid precautions have, therefore, become necessary in the cities of India which are within the striking zone of powerful aircraft operating from hostile bases in Africa and China.

Poisonous gases may be classified in terms of their physiological action or in terms of their tactical value in military operations. The simplest gaseous poisons have asphyxiating properties. Thus hydrocyanic acid directly poisons the tissues which are prevented from using oxygen and is rapidly fatal in concentration of 800 per million. The French used this gas in large quantities, but the results were not satisfactory, as the gas being lighter than air soon disappeared in the higher reaches of the atmosphere.

The irritant gases produce lesions in the respiratory system and cause death by suffocation. Chlorine, phosgene, cyanogen chloride, chlormethyl chlorformate, brombenzyl cyanide are some of the powerful irritants whose deadly efficiency in war has already been demonstrated. Brombenzyl cyanide, for instance, is fatal in concentration of one part in 100 million parts of air.

Another type of gas which has great military value is known as lachrymators. They produce temporary or permanent blindness by weeping. Typical examples of these poisons are mustard gas, bromacetone, xylylbromide, chloracetophenone and many complex bromine compounds. The first mustard gas attack by Germans in July, 1917, produced awful results. It had no immediate effect on the eyes, but next morning, almost everyone in the British line was absolutely blind.

Mustard gas has also another property which revealed the possibilities inherent in chemical warfare. It produced skin-burning effects which, although rarely mortal, were sufficient to put a man out of action for several months. The Americans now claim to have

prepared a liquid, which they call "methyl," which is so powerful that a drop anywhere on the skin would cause death in a few hours.

The chemicals which produce sneezing came into use in the later phases of the Great War when the mask had become a part of the soldier's normal equipment. Typical examples are diphenylchlorarsine and diphenylcyanarsine—one millionth of a gram of the latter in a litre of air would cause a casualty for an exposure of one minute. These are solid substances, but are transformed into ultramicroscopic dust when the shell bursts. This dust was expected to penetrate the protecting materials in the gas mask which are meant for absorbing gases and vapours. Once a speck gets into the nose, violent sneezing begins, the protective mask has to be taken off, and then the other lethal gases have full play on the victims.

The general protoplasmic poisons are now receiving special attention. Tetraethyl lead is now in common use as an antiknock which is blended with petrol. Largely diluted, it is harmless; but its vapours may produce acute poisoning, the patient becoming violently maniacal and often committing suicide. Dichlormethyl ether puts in disorder the semicircular canals of the ear, and a patient cannot keep steady or maintain his balance. The great surprise of the next war may be the large-scale use of compounds which will derange the nervous system of the combatants and throw entire armies into confusion.

Lastly we come to camouflage chemicals. They are extremely malodorous compounds like butylmercaptan and dimethyl thiocarbonate, which are useful to conceal the presence of lethal gases. They enforce the continuous use of the protective mask which is extremely disagreeable, or in the alternative, encourage fatal carelessness.

From the point of view of military operations, the poison gases may be divided into two classes—the persistent types and the non-persistent types. The latter are relatively volatile substances which are useful in attack as it entails little risk to occupy the ground vacated by the enemy a few hours after the gas attack. Towards the concluding phases of the Great War, the allied attacks were mostly supported by the free use of chlorinated vinyl arsines which have got multiple physiological effects—irritation of the lungs, eyes and skin, and also sneezing effects are produced.

The highly persistent, highly lethal compounds have introduced a new type of strategic obstacle. Mustard gas is *par excellence* the war

chemical of this type. Its extensive use would convert open areas into absolute obstacles against the movement of huge masses of men owing to the certainty of a high percentage of casualties. It is well-known that the German High Command believe more in chemical barrages temporarily put up, than in permanent costly fortifications which often become death-traps.

Devices for the protection of the individual against these poisonous chemicals have tried to keep pace with progress in attack. The gas mask is made of rubberised fabric and is fitted with eyeglasses and with inlet and outlet tubes fitted with valves. The inlet tube is joined by rubber tubing to a canister which contains absorbing materials through which the air must pass during inspiration. The canister is fixed on the chest of the wearer. The resistance to breathing becomes less as the thickness of the absorbing material decreases. Intensive researches are in progress with a view to increasing the efficiency of these absorbants. For protection against sneezing compounds, a disc filter of specially prepared cotton is fitted on to the canister. In Table I are given the types of canister recommended for use in U. S. A.

It is very difficult to counter the effect of poisons which are absorbed through the skin. An oilskin undergarment and rubberised fabrics for outer garments appear to be the only solution. The physiological effect of such apparel which absolutely prevents ventilation of the skin, specially in tropical countries like India, has not yet been properly studied. In any case, the mask and this kind of proetctive clothing must be very disagreeable devices to the wearer; and there is no denying that the physical and mental efficiency of the soldier goes down very considerably.

The measures to be adopted for the protection of civil population against aerial gas attack far behind the battlefront may be summarised as follows:—

Provision of protective equipment; arrangement for sheltering facilities; organisation of degassing squads, and provision for medical aid.

Air attack is so costly that it would naturally be confined to cities of industrial or strategic importance, or to centres of communications. The people of rural areas need not worry much in this respect. The first line of protection in big cities is the use of defence

air squadrons and anti-aircraft guns. If the air attack takes place at night, black-outs should be arranged so that enemy airplanes cannot spot the target of attack. There should be free distribution of gas masks and, immediately on notice, each non-combatant should put on the gas mask which should be always ready at hand. Each building, whether residential or commercial, should provide sheltering facilities for its inmates; for residential buildings, a room in the basement which can be air sealed is best for the purpose. Underground tunnels are expensive, but wherever possible they should be provided and made easily accessible.

After the air attack is over, the grounds and narrow streets should be degassed by well-trained special brigades. Artificial winds may be created by motor trucks fitted with sails and moving through the streets with great velocities. Persistent gases like mustard one should be removed by washing streets and faces of buildings with water from hydrants mixed with bleaching powder.

It is essential that public utility service stations, like water reservoirs, pumping stations, electric power stations, should be in future located and designed in such a way as to be immune from air attack. The reservoir at Talla is a prominent object which can be put out of action in a minute by a stray enemy plane passing over Calcutta.

Preparation for gas defence must include plans for the mobilisation of all medical men, nurses, medical attendants, and ambulances, and for their assignment to first-aid stations which should be established in large numbers all over a city.

But the preparatory measure of paramount importance is the instruction of the general public. The less panicky the civilian population, the smaller the number of casualties. The advice—you must keep your heads cool—is nowhere more effective ; and public instruction should be put into effect through all publicity agencies, press, pamphlets, cinema and radio-broadcast.

TABLE I

	Conditions	Contents of Canister	Colour of Canister
1	Protection against organic vapours, such as aniline, gasoline, benzene, ether, toluene, and the like (when not over 20% in air).	600 cubic millilitres or more of activated charcoal.	Black
2	Protection against acids such as hydrochloric, sulphur dioxide, nitrogen peroxide, chlorine and the like (not over 1% in air).	600 cubic millilitres or more of soda lime or fused caustic soda.	White
3	Protection against ammonia gas not over 3%. The 3% limit cannot be long endured by the wearer because of the skin irritation from the gas.	Copper sulphate and charcoal	Green
4	Protection against carbon monoxide (not over 3%).	A mixture of metallic oxides known as "hopcalite" which catalyzes the combustion of carbon monoxide with oxygen from the air and produces carbon dioxide.	Blue
5	Protection against all of the above gases; the "all-service mask."	All of the absorbents mentioned above, but only small amounts of each.	Red
6	Protection against a combination of organic fumes and acid fumes.	Activated charcoal and soda lime	Yellow
7	Protection against ammonia and smoke.	Copper sulphate and charcoal with a filter pad for smoke.	Brown
8	Protection against hydrocyanic acid gas (not over 2%).	Caustic soda impregnated on pads	With a green stripe

TEACHING ENGLISH IN INDIA

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(Visva-Bharati)

VERY few teachers and professors of English in Indian colleges are aware of the fact that to teach a foreign language to students implies the teaching of foreign attitudes, conceptions, and ways of life as well. The mere attempt to supply the student with the plain meaning of a word very frequently fails, because the psychological associations connected with that particular word are essentially different in the case of an average Englishman and of an average Indian student. This discrepancy in the different ways of association seems to be the stumbling-block to the teaching of English in Indian colleges.

In terms of psychology there is no " plain " meaning attached to a word ; whatever the writer wants to communicate by it, its meaning will be distorted by associations emanating from the readers' attitudes, conceptions, and ways of life. Furthermore, there are many words in English which do not evoke any associations at all in the mind of an Indian student. Let us take such a simple and common word as " church " : while reading or pronouncing it, an infinite number of associations of an emotional as well as intellectual kind will spring up in an Englishman's mind—associations connected with his childhood, his parents, his education, his religious convictions, and so forth ; a relevant combination of all these associations will constitute what we call the " plain meaning " of the word " church." In the case of an Indian student no relevant associations will be forthcoming. His mind will remain blank, and if asked for an appropriate definition of the word " church," he will have to be satisfied withsome kind of abstraction disconnected from his own personal experience, such as " a church is a building erected for the purpose of religious worship."

If the teacher of English in an Indian college considers the language problem in its psychological implications, he cannot help realizing the utter impossibility of substituting some kind of " new " meaning for the old and irrelevant abstractions. It seems somehow that the " plain " meaning of a word which is in no way related to the student's

reality, cannot be taught. And as only a very small number of Indian students have the opportunity of visiting England, it seems that this problem cannot be possibly solved by the old methods of teaching. The real difficulty of the teacher of English, however, begins only when he is asked to explain not one word alone, but a whole combination of words, for instance, a poem.

Realising that fundamentally the explanation and analysis of a poem is nothing but a problem of communication, he will try to explain and to analyse the meaning of this particular communication. On the back of everything that a writer thinks worth while to communicate, is an experience, and the words he uses will be either sensory stimuli or symbols. As long as they remain sensory stimuli, they may be understandable to anybody ; their sound-effect will be purely musical, for instance, and in terms of psychology no discrepancy in association will be found to exist. But when these same words become symbols for some definite experience, the meaning and significance of this experience will be unintelligible to most of the Indian students, partly because their associations will be different ones from those of the writer of the poem, partly because the same symbols in their own vernacular represent experiences of quite a different kind. They may be able mentally to " understand," to grasp the experience, but it will again be disconnected from their own reality—a " meaningless " abstraction or a commonplace.

The teacher will experience an even greater difficulty when explaining to Indian students a poem in which words are no longer direct symbols of the poet's experience, but in which he has used figurative language of a highly complex kind ; many such poems are included even in the curriculum of Intermediate college-classes in India. If the " plain " meaning of a word cannot be made clear to a student, how can he be made to understand the essentially figurative language of Milton, for instance ? Yet, " critical " questions on Milton still occupy the first place in the Calcutta Intermediate examination. The student will again take recourse to some kind of " intuitive " reading hoping that his own emotions and feelings will be strong enough for a proper understanding of Milton's figurative speech, or he will indulge in a prosaic " over-literal " reading with special emphasis upon pointsof grammar, syntax, and construction. He will undoubtedly fail in both his methods. Neither the intuitive nor the over-literal approach will bring him nearer to the writer's original experience, and even if he

catches the " sense " of it (usually with the help of some annotation), its significance will get lost in this unnecessarily elaborate processs.

The teacher of English in India will come across a great number of other difficulties of a no less disconcerting kind. The poet's imagery will evoke an entirely different set of images in the young Indian's mind. The Indian student, especially when reading English poetry, will be subject to mnemonic irrelevances, erratic associations in his mind, emotional reverberations which have nothing whatsoever to do with the original poem. He will continually suffer from stock-responses misinterpreting the views and emotions expressed by the poet. He will lose himself in the poet's images, metaphors, symbols, and his response will in most cases be irrelevant.

It is hardly possible to expect anything else. If the meaning remains ambiguous, the reader's " feeling " cannot be the " right " one: he will either fall back into sentimentality or inhibition, or take refuge into some kind of emotional commonplace. There is an intimate relationship between " understanding " and " response " which is not sufficiently clear to many teachers of English in India, and which, it seems, can be made clear only if the teaching of a foreign language be first of all considered in terms of psychology.

Considering the fact that Indian students very rarely leave India, and that, on the other hand, they have to go through a fairly large number of English books in order to secure a University degree, some new and more adequate methods should be found out, which will make a proper understanding of English language and literature possible and at the same time train their literary sensibility and their critical awareness. Emotional and intellectual stimuli should be grasped by the students in their entirety and their response should adjust itself to this new set of stimuli. Until now the quantity of reading matter was the decisive factor in the teaching of English in India. An appalling number of frequently irrelevant books had to be gone through at a tremendous speed. If there was any response at all to these particularly strong stimuli, they were those of an automaton.

Very few attempts have been made to supply the student with a proper historical background. The social, political, and economic background has been completely neglected. As for the psychological approach to literary matters, it seems to be altogether outside the scope of University training in India. By means of an historical background the student will be enabled to find a proper historical setting for

words, expressions, images, similes and so forth. If, on the other hand, he knows something about the social, political, and economic life of England, he will gain access to an entirely new set of ideas, new implications, possibilities and vistas with regard to literature as well. If, finally, the writer's character, personality, and "style" have been subjected to a close scrutiny, the words he uses will lose their conventional meaning and they will appear altogether new in this essentially personal context. In order to reach this goal a new course of study will be necessary. Books will have to be more carefully selected and especially with a view to training the student's sensibility and critical awareness.

But how can the student's critical awareness be trained, if he remains ignorant of the most elementary principles of literary appreciation? By means of these various cultural "back-grounds" it should be possible to substitute a "new" meaning to the stereotyped and abstract ones. If the "background" will give meaning to the context, the word itself will be revitalized. The background will give rise to new associations whenever the "plain" meaning of a word is questioned.

The problem of communication will also be solved to a considerable degree. If the student be able to understand what exactly the writer wanted to communicate, the significance and relevance of the writer's experience will become clear to him. And his response to these stimuli will no longer be out of proportion, but in keeping with the writer's own feelings, his attitudes, conceptions, and ways of life. Such a process would, indeed, be a test for a well adjusted and conditioned literary sensibility.

In a book devoted to the teaching of English in India we find the following interesting statement: "Poetry, more than prose, needs to be visualized, to be appreciated, and this means that in the teaching of it the right association of ideas is more important than mere 'meanings.' If the pupil is to appreciate a poetical metaphor, 'we must supply him with experience that will make it meaningful,' *i.e.*, we must call up images similar to those in the poet's mind."[1] Unfortunately no method is suggested how to supply the student with an experience which by its very nature is entirely foreign to him. The question which a teacher of English has constantly to ask himself is, whether

[1] M. S. H. Thomson and H. G. Wyatt: *The Teaching of English in India*, Oxford University Press, 1935.

the various "backgrounds" will be a sufficient help for true literary appreciation. Experience has shown that the advanced Indian student when studying English poetry will concentrate first of all upon the "meaning" and will only later on attempt to deduce from the meaning the original experiences of the poet.

He will, therefore, indulge in speculative elaborations divorced from experience. Vague and abstract entities will take the place of the poet's mental attitude which after all is something pretty definite. His appreciation will be "standardized" and inhibited. He will draw irrelevant conclusions from the meaning of words as to the "ideas" of the poet; and the literary appreciation of a poem will become (as it so frequently does in India) a question of belief or disbelief. To believe or disbelieve in Wordsworth's "ideas" is merely a matter of stock-responses and preconceived convictions. If the teaching of English poetry in India is to be of any value whatsoever, the philosophical or metaphysical or ethical aspect should be given less prominence, in favour of a more critical and discriminating approach.

This approach to poetry, after the different "backgrounds" have been given, should then consist in a gradual awakening of the student's literary sensibility and sense of discrimination. If the teacher will make it clear to the student that "the artist is concerned with the record and perpetuation of the experiences which seem to him most worth having,"[1] abstract entities of a moral kind will once for all vanish from the student's mind and he will consider the poet's experience (as expressed in a poem) not as something which he has to believe or disbelieve, but as a piece of living reality to which the poet attaches a certain value; he will also be brought to understand what experiences seemed to the poet most valuable, and this will give him a deeper insight into the poet's mental and emotional attitudes than the preconceived moral ideas of "vice" and "virtue." A theory of value as applied to the poet's experiences will not only supply the student with a knowledge of the creative process in the poet's mind, but will also help him to grasp the cultural setting in which experiences of that kind were considered to be most valuable.

A similar consideration should be applied to so-called aesthetic "standards." Modern psychologists and educationists have realized the necessary drawbacks of a purely aesthetic approach to literature,

[1] I. A. Richards: *Principles of Literary Criticism*, 1925, p. 58.

especially in the case of a foreign literature. How can a professor of English in India take upon him the responsibility of moulding the student's aesthetic apprehensions by means of abstract formulas ? Yet, whenever he opens one of the more popular " help-books " or Annotations, he will find there a great number of those pseudo-aesthetic statements entirely unintelligible to an average Indian student, such as " this poem is *marvellously beautiful*," " here the poet has expressed the *harmony* of his soul," " classicism makes for *unity*, romanticism for *variety*," and so forth. In India, the student of English is almost daily confronted with statements of that kind, either in books or through the mouth of his teacher. And yet he is far from comprehending the implications of these aesthetic terms—" beauty," " harmony," " unity," " variety." Here again preconceived ideas will influence his attitude, as it was the case with matters of moral interest. He will call a poem " beautiful," because he *feels* it to be so, and another will be " bad," because no response of a personal kind will be forthcoming. If, however, the *value* of the poet's experience is made clear to him, if, furthermore, his mind has been opened to the fact that experiences as such are beyond " good " and " evil," he will also realize that the " beauty " or " badness " of a poem does not depend on his own personal response, but on an ultimate value which cannot be possibly expressed in terms of aesthetic judgment.

" Harmony, unity and variety " are such other aesthetic terms that should be used in India only with extreme care. Their meaning has become part of the cultural heritage and evolution of the West from Aristotle to Benedetto Croce and T. S. Eliot. There is a natural continuity and evolution in European culture which could be studied for instance in terms of " harmony, unity and variety." The Indian student is not supposed to be in touch with this cultural continuity ; in fact, many aspects of Indian art seem to show that these concepts are of an altogether different order in Indian cultural evolution. It is not possible to " teach " tradition, and all the attempts of reducing the cultural continuity of the West to such abstract terms as " beauty," " harmony " and " unity " will necessarily fail to produce any appreciable result.

What then is the ultimate value of a poet's experience ? And how can it be taught to the student in India ? If we neglect the moral and aesthetic side of a poem, there still remains the experience itself and the way it has been communicated to the reader. The very fact that a

poet's experience has been made available to others should supply the teacher with enough teaching material. And the first thing he will have to teach to his students is to respond to this experience *as a whole*, in a coherent way, without an undue consideration of the moral or aesthetic aspect of this experience. The teacher will, furthermore, have to draw the student's attention to the way this experience has been organized. Any discriminating student of average intelligence will then be able to distinguish between what is purely personal and impersonal in the poem. He will, for instance, realize that all personal emotions must first be organized, that is, "impersonalized," before being expressed in poetic form. He will also become aware of the fact that rhyme, rhythm and metre are nothing but such impersonal expressions of the poet's emotional and mental attitude when depicting his experience. The student will, furthermore, be enabled to inhibit his own personal stock-responses and will suppress irrelevant personal details for the sake of an appreciation of the whole. This kind of appreciation will be unbiased and free from moral or aesthetic prejudices.

Even if, as we have seen, the response of an Indian student to the native element in English poetry has naturally to be limited, he will by this method of discrimination and dynamic response be brought nearer to communication involving attitudes foreign to his own, and his mind will be opened to the meaning of experiences and their ultimate value. He will, finally, see that the important thing in an appreciation of a poem is not the "expression" (aesthetic form), the images and symbols, or the cultural setting, but the poet's own mental and emotional attitudes.

POLITICS AND EDUCATION

HUMAYUN KABIR

I should at the outset like to convey to the organisers of the Delhi Provincial Students' Conference my deep and sincere appreciation of the honour they have done me in asking me to preside over their deliberations to-day. I am fully aware that there are many whose claims to this distinction are greater than mine, and nobody can be more keenly conscious than myself that it could not be mere personal considerations that are responsible for my being in the position in which I find myself. I take it that your selection is symbolic and in conferring upon me this honour, you have sought to express your recognition of certain forces and ideals that are silently working for the transformation of our social, political and economic outlook.

We have met to-day in the historic city of Delhi, a city rich in its culture and traditions, a city where the fate of India was for more than once decided for good or worse. Here have met various forces which have shaped our destiny and made India the land of rich, complex and often contrary modes of life. To-day again, we have met at a time when crisis faces not only the culture and civilisation of India, but of the world as a whole. Rival schools of thought and opposed ideals of life divide and distract the energies of those who want to build up the foundations of a new society and bewilder the minds and intellects of thinkers and workers alike. At such moments and on such occasions, we must undertake a re-examination of the foundations of our accepted beliefs, and I shall consider our Conference justified if it helps us to understand more clearly the nature of the problems with which we are faced and the solutions we must attempt if we are to rescue the world from the anarchy from which it suffers to-day.

What I have said makes it unmistakably clear that students should not, even if they could, keep aloof from politics. This is a point which I have often discussed and which once needed discussion, but to-day the force of circumstances has brought us to a pass where no discussion on the point is necessary any more. It was only a misunderstanding, a misunderstanding only too natural in a politically

* Presidential Address at Delhi Provincial Students' Conference, November, 1938.

unfree country, of the organic connection of student- and after-life that led people to suggest the abstention of students from participation in politics. But where would such a suggestion lead to if followed to its logical sequel ? In the true sense, one's student life never ends, for increase of experience brings with it increase of knowledge and this is a process which must continue to the end of life. On the other hand, devotion to a cause, the instinct and the power to sacrifice one's personal interests for the sake of an ideal are qualities as necessary in after-life as in the days of studenthood. The attempt at artificial division of life into compartments which have nothing to do with one another has been the bane of our fate and the sharp distinction we try to make between student- and after-life is only one of its expressions. That is why our student life is so often restricted and cramped and our worldly life frustrated and vain. As students we try to deny the demands life makes upon us and as grown-up men we lose the emotional urgency and selflessness of student days.

It is, therefore, a happy sign that students in our country are to-day taking an active part in politics. And this they must, when we remember the crisis in culture and civilisation under whose shadow we constantly live. From the point of view of practical necessity as well, the participation of students in politics is inevitable. Open the paper in the morning and every column is full of political news and political views. Is there any one who will say that in the attempt to avoid politics, students must give up reading papers and shut themselves up as recluses in a scholastic paradise ? And once they read papers and form their views, how to draw the line between theory and its application ? Is discussing politics among friends a crime ? Does it become one the moment, instead of an audience of a dozen friends, you expound the same views before an audience of a few hundreds or thousands, some of them not friends ? Again, students have their own problems and yet when they attempt to solve them, they find that it inevitably takes them into the regions of what we call politics. The system of education which obtains in our country is bound to evoke criticism. Shall we not try to change it simply because the attempt may lead us to the borders of the forbidden land of politics ?

Students must prepare themselves for future participation in social life, and what is politics but the organised expression of social life ? The sense of unreality in modern Indian politics and the lack of discipline and well ordered thought in many of our politicians have often

attracted attention. Our politicians often behave like schoolboys, and spoilt ones at that, in their lack of sense of discipline and responsibility. Have we tried to find out the cause of this phenomenon ? To me it seems that they behave as schoolboys in politics, because as schoolboys they never took any interest in politics, not even the schoolboy politics which serves as the training ground for future citizens and leaders in free and independent countries. Trial and error are the instruments through which life teaches us its most important lessons and it is better that the experiment of trial and error should occur in a sphere where error may not involve in disaster the fate and future of thousands of men and women. As social beings we cannot thus avoid politics ; is it not better then that our mistakes in politics should occur in the restricted sphere of student life where error will not bring in its train tragedy and disaster for millions ?

Yet in a politically unfree country like ours, it is not strange that attempts should be made to divorce students from politics, for participation in politics inevitably breeds the attitude of criticism and enquiry. If this attitude grows from early youth, it is bound tc undermine the basis of authority on which alone political domination can last. Properly understood, this is also the aim of education, for the purpose of education is acquisition and increase of knowledge and this requires curiosity and inquisitiveness. Students, if they are true to their vocation, must ask questions about everything, and must examine and criticise whatever comes to them in the garb of authority. Acceptance must be based, not on compulsion but intellectual conviction, but the moment such a mentality grows, the blind appeal to authority would go. With the rejection of authority and the growth of freedom of thought and mind, imperial domination would be imperilled. Education in imperial regimes is, therefore, based upon the idea of unquestioning acceptance. Freedom of thought and freedom of the intellect are definitely at a discount. Indian society based upon the conception of authority, and Indian religions emphasising revelation and sanction tried to induce in the minds of young men reverence for status as immutable and unchanging. In consequence, the general policy of our education has always emphasised authority, not criticism, blind faith, not free and unfettered enquiry, and that is why our education has so often defeated its own purpose.

The revolt of our youth must, therefore, be more fundamental and far-reaching than that of youth in other countries need be. They

fight a political or social system, but here our fight is against the accumulated tradition that is in our blood itself. We have to learn anew the distinction between non-conformity and disrespect. Difference of opinion is here regarded as disobedience and very often our elders demand our acceptance, not because of the reasonableness of what they say but just because it is they who say it. Against this blind acceptance of authority, a new mentality of defiance has grown in recent years. A new spirit of criticism is surging throughout the land. To older generations and persons in power, rejection of authority is tantamount to turbulence, and mere indiscipline. Turbulence and indiscipline also there may be, at times, but it is only to be expected as a reaction from the blind acceptance of the past. But shall we, because of occasional excesses, forget that the so-called indiscipline of the students of to-day is only the emergence of a new consciousness and of the urge towards the eradication of the evils from which society suffers to-day ? The question which I want to ask is a different one. The spirit of criticism is here to-day but does this criticism go far enough and deep enough ? Do we merely talk of criticism and accept blindly social customs which are out of keeping with the spirit of the times ? Do we look at society and government, at education and religion, at rights and duties with the eyes of questioning, critical, rebellious, revolutionary youth ? Or, do we merely luxuriate in a vague emotional satisfaction of the spirit of enquiry and allow it to degenerate into a mere intellectual pastime ?

This raises the question of discipline in student life. We have seen that students cannot avoid politics even if they want, and also that they should not even if they could. But at the same time, they must remember that if they exhaust themselves in the demands of day-to-day politics, if they do not carefully prepare themselves for the future when the task of guiding the destinies of their people shall be theirs, they will have to answer to future generations for their failure. Politics to-day is a matter of complex calculations and wide familiarity with the history of many countries and many races. If in the impluse of the moment the student forgets that action must be based on theory, that statesmanship is the result of much experience and much thought, how shall he shoulder the responsibility when his own turn comes ?

Besides, impulse, however powerful it may be, can never lead to success unless there is behind it a cold and calculating brain.

Mrs. Naidu told you yesterday of Kemal Ataturk and told you that the secret of his success lay in the combination of enthusiasm and discipline, impulse and order, fervour and iron control. Often in our country we hear it said that there is no time for thought during a conflagration, but those who say it forget that it is then that thought is most necessary. How to husband our resources—how to save what we may from the destruction which will otherwise overtake all we have? Mere running about does not put out a fire, nor is the enthusiasm of a child of much help there. There must be true discipline and control, volunteers must line up and work in co-operation to fight the flames. This control, this discipline makes a fire brigade of a dozen of far greater value than a mob of twelve hundred: it is again this discipline that makes a small handful of soldiers prevail against the fury and the onslaught of infuriated mobs. That is why the student movement in India and elsewhere, while it keeps in close contact with politics, must also remember that it must not waste its energies, it must not squander the substance of its soul in merely achieving the momentary, in meeting those demands which at the moment seem important but dwindle into insignificance before the day is out.

Such abandon, such wild enthusiasm could perhaps be understood if it flamed up and solved once and for all the problems of the world. If you could be sure that a conflagration will never repeat itself, perhaps you could justify everyone's making one supreme effort to master it. But what about a fire that is eternal and must burn so long as man is man? The problems of politics are not such that you may solve them here and now: they are problems inherent in the nature of man himself. Like men who live by the sea and fight its might day in and day out, year in and year out, we stand by the shores of human destiny. Would it do for the dwellers by the sea to exhaust the energies of all, of men and women, of boys and girls and even infants, in making one supreme effort? They must garner their resources, they must prepare to carry on the fight till the end of time. For us, the solution of one political problem will create a hundred new ones. The destruction of British imperialism will only open the path to new effort and new endeavour, to the solution of the problem of rehabilitating Indian life, which is far more stupendous, far more arduous than fighting a foreign enemy. For that future task, students must preserve their strength, their enthusiasm, their discipline and their faith.

There is another thing we must never forget. Youth is not a function of physical age alone, for there are young men whose minds have already ossified with the weight of ages and there are men, old as years go, whose vitality, whose spirit of enquiry and constant adventure into new modes of life have led them to new discoveries and new realisations of truth. Shall we forget that Immanuel Kant, often regarded as a typical pedantic philosopher, formulated his transcendental theories at an age when most men think of retiring from the struggle of life? Shall we forget that Karl Marx, when he worked out his revolutionary theories in politics, economics and philosophy, was a man well past his prime? Coming nearer home, can we forget that we have among us to-day Mrs. Sarojini Naidu who seems to grow younger with every passing year? Youth, we must confess, is a quality of the mind, not of mere physical age.

The spirit of criticism in the youngmen of to-day is then a happy sign. It indicates an awaking from the torpor and lassitude of spirit from which we in India have suffered for ages, but to revive the question I have once already asked, Do our criticisms go far enough ? Are we aware of the nature of the problems which cry for a solution and cannot wait? Do our minds revolt against the injustice of the social and political system which keeps nine men out of every ten illiterate and ignorant in our country ? Agriculture is the foremost industry of the country and yet hardly eighty rupees per thousand of the population per annum is spent against the thousands spent in primarily industrial lands like America and Great Britain, but how many of us care to know these facts, and of those who know how many pause to think of the reasons for such absurd disparity ? Even in the matter of life and death of the people, do we realise why it is that men of our country hardly live for thirty years, when the average expectation of life in England is fifty-four years or more ?

We look at the injustices of our social system and see a spectacle of appalling stupidity and lack of sense. We even break the heads of men in order to save the heads of cows and bullocks. But the same spectacle of stupidity, though with local differences and variations in degree, meets our eyes when we look at the world outside. Everywhere in the world, social extravagance and social wastage lead to social frustration and unhappiness. One man toils and another enjoys the fruits of his labour. One is overwhelmed with abundance and knows not what to do with

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his superfluities while another struggles for a bare subsistence and cannot find it. Can social stupidity go further than what we find in modern capitalistic civilisation, if civilisation it can be called, where millions go hungry and yet thousands of tons of wheat are burnt in order to secure a sufficient margin of profit to those who already roll in wealth? Thousands lack clothing and men and women have nothing to cover their nakedness, and yet factories are closed and millions of workers sit idle and unemployed. Do we search in our hearts to find whence results this tremendous wastage of human material with all its acquired efficiency and skill? Men's wants are legion and the conquest of the powers of nature has placed in our hands the key to their satisfaction, and yet social stupidity and social inertia will not allow a solution in which every human being may find the field for a fruitful and happy life.

Our ingrained habits of thought and life are startled and disturbed when these questions are raised. The spectre of socialism and communism haunts our imagination and we think that to talk of organising the resources of society in the interest of society is to open the door for these to walk in. But how to conceal the fact that every one of us want organisation when it suits our purpose? The millowner wants that the State through its organisation and machinery should protect him from the demands that his labourers make, or better still, so organise the life and training of the labourers that they may not think about undesirable questions like a human standard of life at all. During the height of *laissez faire*, millowners fought for the maintenance of laws that guaranteed the freedom of young workers, boys and girls of twelve or less, to work for sixteen hours a day for six days in the week. Do not the landlords of our country want such social and political organisation as will guarantee to them the privileges they have usurped and want to pass as rights inherent in their status? Is not the very demand for the maintenance of the *status quo*, whether it be with respect to caste among Hindus, purdah among Muslim women or imperial domination by the British—a demand for organisation of society in a particular way? Is not the recent phenomenon of fascist organisation of society in the interests of capitalism in itself a recognition of the urgency of organisation and an attempt to prostitute it in the interest of finance capital? In a word, do not all objections to social organisation and social control in the end boil down simply to an objection to organisation in which

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social interests are exalted instead of the personal interests of the exploiting classes in society?

We often hear of the problem of unemployment to-day, but in our country at least, we mean by it only the problem of educated unemployment, *i.e.*, unemployment among the middle classes. This attempt to divide the problem of unemployment itself shows our secret sympathies, for how can one who really thinks of society as an organism refuse to think of the unemployment or half employment of agriculturists and labourers? The essence of unemployment is the inability of society to utilise the different social units, and it is immaterial whether these units are educated or uneducated, belong to the middle or the working classes. I would here draw your attention only to the curious fact that if you really believe in *laissez faire*, if you really think that social control should not operate on the lives of the members of society, you have no right to worry about the problems of educated unemployment as well. I have already referred to the anarchy which prevails in the fields of industry and commerce. Men go without the essentials of life and yet luxuries are produced in a constantly increasing stream. Iron and steel works in England were closing down, cotton factories were shut, but the distilleries and the cinema industries flourished even during the darkest days of economic depression. Uncontrolled and suicidal competition goes on in these fields, and if you hesitate to apply social control there and determine in what ways the energies and the resources of the community should be used, you must in all logic also refrain from interfering in the question of unemployment of the educated middle class. You must, in order to be consistent, there also say that it is a matter for individual concern as to who finds employment and who does not and the State can or ought to interfere in it no more than it can or ought in the governance of industry.

But not the most hardened capitalist or imperialist dares to say so. Not the most fanatical upholder of individualistic anarchy in the economic and political field dares to say that society has no responsibility towards the individual and his happiness. England dare not suspend her unemployment benefit even if she wants and even Fascist Germany must provide winter relief to those who cannot provide for themselves. America with all her individualism must yet think of New Deals and other methods to soften the rigours of unemployment among her workers. The moment this fact is realised, there is no way of denying

the supreme importance of social control and the only question becomes, " In whose interest shall society be controlled, in that of a handful of those who enjoy all the good things of life or in that of those whose history till now has been one unredeemed record of service and suffering ?" With the idea of social control comes the prospect of a society in which each man may have a function and a purpose in his life.

In the anarchic world of to-day, there are men who can and do spend millions to satisfy a moment's whim and there are millions who have not the means for maintaining even a merely animal life. Unsatisfied demands face unemployed labour and unused intellect and skill. Pool them together under the control of society and in the social interest, and there will be neither poverty nor nakedness. According to official and semi-official estimates, in India alone seven crores of men and women live on the verge of perpetual starvation and another fourteen crores live permanently on half rations. If these twenty-one crores of men and women consumed an additional handful of rice per day, think of the profound social consequences. The demand for food will increase manifold, prices of agricultural commodities will go up and thousands will find employment in a rehabilitated agriculture. If these twenty-one crores of men and women could afford proper clothing—for without proper food, how can they even think of covering their nakedness—the demand they would create would provide work not only for all the mills of India but also for those of Lancashire, and perhaps even then, without fresh development in the industry the demand could not be met. If this vast mass of humanity, living a famished, hungry and naked life, received proper medical attention, if the terrible infant and maternal mortality among them were sought to be checked, if proper educational facilities were brought to them, a demand would be created for thousands of doctors and nurses, thousands of hospitals and pharmacies, thousands of teachers and schoolmasters and writers and libraries, and employment would be created for millions of men and women. And the exploited and the hungry are not to be found in India alone. Their number is legion in China and Central Asia, in the depths of Africa and even in the heart of the so-called civilised countries like England, France and America. The exploited all over the world constitute the vast majority and it is one of the wonders of history that they have not seen through the exploitation from which they suffer and risen in revolt to create a new order and a new society out of the ruins of the old.

We live to-day in a world where civilisation and culture are faced with imminent disaster. Conflicting ideas confuse our minds and the prospect of a collapse of world civilisation haunts our imagination. The conquest of nature has placed infinite resources at our disposal, and yet in the midst of plenty and abundance, men and women go hungry and naked. Men starve and yet foodstuffs are destroyed every year. Men and women have no clothing to cover their nakedness and yet mills remain idle, and the acquired skill of operatives is allowed to go to waste. War under modern conditions has become a danger not only for the attacked but also for the attacker, and yet inspite of a guarantee of universal destruction, nations think and act in terms of war alone. In a word, we live in a world which seems to have gone mad and where men and women act out of a combination of distraction, fear and perplexity.

In this mad world of to-day, it is inevitable that young men must think afresh of their fates and their future. Those who have seen better days and lived in more prosperous times may have memories which bring faith and courage to them, but what of those whose future is still before them ? What prospects do they have and what hopes can they hope ? Politics has, therefore, become the life blood of young men and women all over the world, and the spirit of enquiry and restlessness is only one manifestation of their troubled searchings after an uncertain future.

It is not without significance that the student movement has developed in its present form and with its present intensity in the post-War years. Not that students in the past have not taken part in the revolutionary up-surging of the peoples of the world. They were, as young men, in the vanguard of the American War of Independence and in the revolutionary struggles of eighteenth century France. But though they have shared and struggled and suffered in such revolutions, they have not done so as a conscious student body. It was the Great War that brought consciousness to them and forged the great movement of which you here form a part.

The Great War came as a great shock and a great liberator of the spirit. Everywhere young men were told that they were fighting for honour and truth, for justice and liberty, for the right of self-determination of nations and the value of the plighted word. Everywhere people believed that this was a war to end war, that they were fighting for self-defence against unjust and unjustified aggression, and yet when

the war ended, they found a peace imposed which ended even the hope of peace.

During the anxious years of War and ever since, these questions have troubled the consciousness of young men everywhere. How could every one fight in self-defence? If every one wanted peace, how could there be the hideousness of war? If every one wanted justice and was prepared to render justice to others, why the horrible nightmare through which the world is passing even to-day ? Through searching of heart and the education of suffering, young men all over the world learnt the bitter lesson. They realised that conflict was born of repression and injustice, that war was caused by the desire of one people to conquer and subjugate a fellow race, and the motive of domination could only be found in the desire for economic and other exploitation. One nation desired to exploit the resources of another and thus increase its wealth, but this it could do only if it had political control over the other. Thus empires are built for the purpose of creating, capturing and retaining markets, and contrarily, conquered countries find that they can never solve the problems of poverty and frustration without first achieving political freedom. National glory and imperial pride may have contributed to the wars of peoples, but the fundamental cause behind such manifestations is economic. Markets for one's produce and the desire to maintain a higher standard of life at the cost of less fortunate races have caused more wars and more misery than any other factor in human history.

Suppressed nationalities struggle for independence, for without independence they cannot realise their own potentialities. Conquering nations resist that claim, for once these achieve their independence, there will be no possibility of exploiting them. Hence, exploitation and resistance to it supply the central core round which conflicts rage and the bitterest struggles are fought, though high-sounding phrases and ideas are used to cover the nakedness of such exploitation.

But there is a fundamental contradiction in such imperial exploitation. The classes which enjoy the fruits of empire have to delude their less fortunate countrymen and this they can do only by playing to their national vanity. Emphasis upon national dignity inevitably evokes a reaction in the conquered nation, and develops a sense of nationality there. Soon the two nationalities face one another and a conflict becomes inevitable. Not only this, but imperial exploitation tends to raise the standard of life in the imperial country. Costs of production go up and

finance capital there seeks new fields of expansion and exploitation in the backward countries. New capitalism develops there and soon the two capitalisms engage in a mortal fight. In a word, where there is imperialism, there must be war and where there is capitalism, there must be imperialism, whatever the covering it may adopt to hide its real nature.

Freedom is, therefore, the first principle of the student movement of the world. Young men all the world over realised that there can be no peace and, therefore, no progress till freedom is realised for every nationality in the world. But this freedom cannot and does not mean mere political freedom. If the history of nineteenth century Europe has taught us anything, it has taught us that political liberty without economic equality is a mere mockery. Political democracy is meaningless without economic and social equality, and history has further taught us that economic and social equality cannot be achieved except in terms of a classless society from which the motive of private acquisition and profit has been eliminated. The freedom for which the student movement stands is freedom in the political, economic and the social field, for it is only on the basis of such freedom that the structure of peace and progress can be built. That is why the student movement has adopted freedom, peace and progress as its motto, and made peace and progress the superstructure based on the fact of freedom.

In India to-day the identical problem faces us. Without the achievement of freedom, we cannot realise our inmost purposes and that is why the student movement has linked itself to the struggle for political independence. But that is only the beginning of our endeavours. Once political independence is achieved and the problem of poverty faced, new perspectives open before us and the student movement must be equally alive to them. Other politically free countries have not solved the problem of their unemployment. They have not solved the problem of social inequality and social injustice. How can we then hope that by the mere achievement of political liberty we can solve them in India ?

The student movement must, therefore, act in terms of realizing political liberty in India, but it must think and dream in terms of a new order of society in which the accidents of birth and wealth shall not blind our vision to the fundamental solidarity and brotherhood of all mankind. The fact of society is the evidence of man's interdependence and in the modern world, where space and time have shrunk

and are continually shrinking, there can be no stability, no freedom, no peace and progress unless we can achieve them for the whole of the world.

Therefore we must work for achieving them within society in altering the basis of relationship of individual to individual and we must also work to make them the guiding principle of the relation of community to community, of race to race. Complete economic, political and social freedom of the individual and the race must be the guarantee of world peace and world progress.

McDOUGALL'S CONTRIBUTION TO PSYCHOLOGY

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WILLIAM McDougall, the psychologist, has passed away, according to a press report issued towards the close of the last year (December, 1938). It is a sad commentary on the poor interest that the general public takes in the most human of sciences that his death has been so little noticed in newspapers. It is rather difficult to believe when we think of the many famous works on psychology that he wrote—and his most famous work was published as early as 1908—that he was not even seventy when he died. He was born in 1871, and he wrote his *Social Psychology* when he was thirty-six years old. The book met with immediate recognition. That the interest the discerning public gave it was not of an ephemeral character can be gathered from the fact that more than twenty editions of the book have since been published.

McDougall was not a specialist in the sense that Charles Myers is a specialist in Industrial Psychology, that Thorndike is a specialist in Educational Psychology, or Spearman is a specialist in cognitive principles. On the other hand he surveyed the various aspects of psychology and made valuable contributions in different directions. One of his earliest publications was on the body and the mind, and until the end he maintained a lively interest in the intimate and inevitable relation between the two. He wrote one of the ablest and most comprehensive books on the group-mind ever written by an Englishman. His *Outline of Abnormal Psychology* is one of the clearest and most reliable introductions available to an English general reader to the manifold and intricate problems of abnormal psychology such as dissociation, suggestion and hypnotism, day-dreams and dreams, obsessions and phobias, and paranoia and schizophrenia. His greatest and best recognized contribution to psychology, however, is his insistence on the human being developing and functioning as an integrated, self-directing, dynamic, purposive self.

The dynamic aspects of life were vividly portrayed through his description of the instincts. The Behaviourists of America consider

that an instinct as described by Mcdougall is too vague and general a term, that what he calls an instinct is on the other hand made up of hundreds of reflexes which alone should be considered by scientific students of animal and human behaviour as units in behaviour-patterns. No one asserts to-day that an instinct is a prime element beyond which we cannot go in analysing behaviour ; for, an instinctive behaviour can be still split into further units or elements of activity. But life is something that is organised—not at one level but at different levels, and what is called an instinctive activity shows life organised at a certain level round a certain life-impulse. To understand life as a whole fully and in clear perspectives, the side-views of life provided in the minor organisation-levels called instincts are of eminent value. It is to the credit of McDougall that he drew attention to the important rôle of the various instincts in life, and all later British works on psychology, especially on educational psychology, have been profoundly influenced by his teachings on instincts. His enumeration of instincts has varied from time to time. In the first edition of his *Social Psychology* he clearly recognized only eleven instincts ; in his *Outline of Psychology* published fifteen years later he admitted thirteen and the possibility of a fourteenth. These are usually accepted by all British psychologists, and are worth mention. They are pugnacity, flight, curiosity, sex, parental instinct, repulsion, food-seeking instinct, construction, acquisitiveness, gregarious instinct, positive self-feeling, negative self-feeling, appeal and laughter. In his *Energies of Men*, published in 1932, he held that three more tendencies can be brought into this list—migration, rest and comfort. It is remarkable, however, that in the last named work he has dropped the name *instinct* and adopted in its stead the word *propensity* to designate what he till then called an instinct. Though the innate tendencies of man are much more modifiable than those of the lower animals and his reactions are, therefore, much less stereotyped than theirs, there does not seem, as I have observed elsewhere (*Psychology and Principles of Education*, Ch. V), to be much valid reason why a word that draws attention to the biological nature of man as having much in common with lower organisms should at last have been dropped by an author who, more than any one else, gave a lead to votaries of psychology in this particular direction. McDougall takes pains to point out, however, that his views and exposition of the subject are practically unaffected by

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the change in terminology. We shall, therefore, be pardoned even by his spirit if we are not enthusiastic in employing the term *propensity* wherever the more familiar term *instinct* can be used.

An instinct according to McDougall is a tendency to reaction in a particular kind of situation to a particular kind of stimuli, and is, therefore, distinguishable from such general tendencies as imitation, sympathy, suggestion and play. These latter tendencies also are innate and unlearned, but neither the stimuli which give rise to them nor the reactions that arise in answer to them are of a particular or specific kind to the extent that is true of the instincts of say sex, flight or fight. The tendency to reaction occasioned by an instinct is, as in all other situations where mental operations are concerned, a threefold tendency. It comprises a tendency to take note of a situation (cognition), to react to it in a certain way (conation) and to feel a certain stirred-up condition (affection). Without cognition the last two aspects cannot function, but in an instinctive reaction the emphasis is laid more on the conative and affective aspects. Hence the dynamic urge, the drive, the motivation or motive-power associated with an instinct. It is this dynamic aspect of life that McDougall untiringly and unceasingly insisted on in his most useful career of forty years of psychological observation, lecturing and authorship.

The instinctive tendencies are not only dynamic, they also help in the integration of life. In the case of animals it is these natural tendencies and drives alone that help to make a unified whole of their varied movements and activities. Man's life is more completely and systematically organised and his instincts are so capable of modification (both in the kind of stimuli that call forth reactions and in the manifold forms that the reactions take) that there are many who believe that to speak of man's instincts is to do him scant justice. It is McDougall's glory that he did trace the great rôle that instincts—or as he later called them, natural propensities—play in man as well as in the other animals, and at the same time indicated in an unambiguous manner how in the case of man life evinces a higher integration than that of the various instincts.

This higher integration is made possible through the development of sentiments—sentiments for one's family, school, country, religion, community, and so forth. But even the sentiments themselves may conflict with one another, and we get men and women of divided loyalties. In spite of the working of the

numerous sentiments which not rarely conflict with one another, ordinary persons are able to get on with a fair amount of unity in their individual life as unified integrated personalities. How is this possible? McDougall has, to answer this question, postulated the existence of a master-sentiment, a major sentiment round which all other sentiments are gathered and to which they all are subordinate. The existence of master-sentiments was first mentioned by him in his *Social Psychology* and the subject was further developed and elaborated in his *Character and Conduct of Life*. Most British psychologists, especially educational psychologists, who discuss the development of character, have either acknowledged McDougall's lead in his line of thought or have taken it for granted. McDougall's name for the most important master-sentiment in life is the *self-regarding sentiment*—sentiment for one's own self (what is called in ordinary language self-respect). But whether the term self-regarding sentiment does enough justice to the attitude of those noble, unselfish men and women who " hate brothers and sisters, wives, husbands or children, nay life itself " in their devotion to a cause which they consider to be more worthy of their service than natural and family affections—men and women of the spirit of Buddha, St. Paul, Mirabai and Tukaram —is something which the present writer has always doubted.

McDougall's view was thus a dynamic view of life, and as such he was always up in arms against the new school of psychology known as the Behaviourist School. Out of fairness to the Behaviourists it may be said that they do not so much deny as ignore the purposiveness of life. Whether they deny it or ignore it, however, the effect is the same—they have no place in their system for those needs and goals which drive the organism as a whole to find satisfaction for general life-purposes. They contend that given certain stimuli, certain reactions are sure to follow in the mechanism of living things. What is true of a finely adjusted man-made machine is true, according to them, of the machinery within man or any of the other animals, *i.e.*, certain stimuli set in motion certain parts of the machinery, such as the nerves, and these latter conduct the energy to all other necessary parts of the body and cause certain reactions. Regular passage of energy through the same nerves causes favoured pathways to be established, which in their turn lead to habits which again account for most of our regular and routine activities. This doctrine is all right so far as it goes, but it does not go far enough. For the mechanists

cannot account for the creation of energy from within the system itself, nor can they account for the ability in the case of man to work against long-established habits when he makes a new decision or resolution regarding his ways of life, as for example when religious conversions take place. They cannot even account for the audacity of a mother-hen to chase a much bigger animal such as a dog when she is with her chickens, though at other times she dares not quarrel with him. Again, as McDougall points out, a chased rabbit does not necessarily run until all its energy is exhausted, but stops its running when the danger is no more felt to be present. Neither does the rabbit always run a straight course, but so regulates its course as to go to some place of safety available ; and if a new enemy is sensed in one place of refuge she turns to another. McDougall never tired of asserting that the Behaviourists are blind and unreasonable in ignoring these and similar other phenomena of spontaneous, self-directed, purposive, hormic activities which even the humblest living beings such as a wasp or a butterfly are capable of performing, not to speak of man himself. On account of their treating living beings like machines in their exposition of life-processes McDougall often spoke of them as *mechanists* rather than as *behaviourists*.

Though the activities of living beings are spontaneous and self-directed; they are very much affected by the membership of the herd. McDougall did not neglect this aspect of life in his enumeration of instincts. The gregarious instinct, the positive self-feeling and the negative self-feeling, the parental or protective instinct (which he regards as one of the basic factors in man's altruistic life) and the instinct of appeal—all these refer to the life of the individual within the group. This is particularly the case with what he calls the general tendencies—instincts are special tendencies—such as sympathy, suggestion and imitation. His *Group Mind* is specially written to give prominence to the part that the group plays in the life of man. Some writers are inclined to think that the basis of man's life in groups is his practical sense which told him even in primitive days that to defend himself against stronger animals it was necessary for him to live in groups rather than as isolated individuals or families. There is no doubt that man's group-life has led to his preservation against hordes of stronger enemies, and that a group can attack or take defensive steps against enemies better. But it is not perhaps these utilitarian and prudential reasons that primarily led to his gregarious habits ; there is a still more

powerful and basic and, therefore, more cogent reason for man's social life, namely, that man is so constituted, like other gregarious animals, that he cannot but seek the company of his kind—in other words, his gregarious life is a constitutional or organic necessity which leaves him uneasy and unsatisfied until he meets and has free social intercourse with his kind. This need not always be for friendly reasons—it may even be that man wants to quarrel with his fellows when he cannot co-operate with them. The essential thing is that the meeting with his kind must be there. The worst punishment for a man is not the hardest and most rigorous labour, but to be subject to solitary imprisonment for a long period. McDougall has also clearly differentiated between a crowd and a psychological group. The crowd proper has no history—no past and no future. The only thing that differentiates it from a mere aggregate of numbers of people is that it has a common interest in some passing affair. But this interest is transitory, and as soon as the temporary common interest is gone the crowd is gone too. But a true community—what may be called a psychological group—is more permanent. It has a continuity of history and membership—formal and material ; it has permanent common interests ; geographical or blood relationships often cement the membership. It has an internal organisation which helps to keep up its common life ; it has a hierarchy of leadership ; and, above all, life in such a group tends to elevate its members from acknowledgedly mean or ignoble ways of doing things ; while the membership of a crowd has the opposite possibility of pulling its temporary members from their own individual standards of rectitude and moral propriety, as no one in the crowd seems to feel any sense of responsibility for its doings. McDougall's clear differentiation between the crowd and the psychological group and his exposition of the basis of this group life is another instance of his leadership in the realm of psychological thought.

Sigmund Freud, the author of the Psycho-analytic School of Psychology, has also written on the formation of the group, and the latter's *Group Psychology* was reviewed by McDougall. Freud's idea of the formation and organisation of the group is peculiar to him inasmuch as he regards the Œdipus complex as the basis of group life. According to Freud the son's attitude to the father is ambivalent, for he both hates and loves the father. He hates the father for possessing the woman he himself loves (the mother), but

he respects him for his strength and power and for the food and the protection he provides. In course of time, according to Freud, the hatred becomes less prominent and the son grows up and remains a loyal follower of the father. In this way all the sons respect the father, and the tribal leader is looked upon by all the members of the tribe with the same attitude as each one shows to his own father. Thus arises *the horde father*, and wherever there is a group formed it is the idea of the horde father, real or imaginary—more often imaginary than real—that keeps the members together. Freud himself calls this idea of a horde father in such organisations as the church or the army an illusion ; all the same, he considers it a highly useful illusion. In contrast to this, McDougall's analysis of the foundations of group life, as comprising of the primary dynamic urges of the gregarious instinct, the instinct of self-assertion and of self-submission, the parental or protective tendency, and the tendency to be influenced by other people's emotional attitudes (sympathy) and the effect of suggestion and imitation is much more satisfying to our rational sense.

McDougall acknowledged and approved of the immense good that Freud had done to Psychology through his drawing the attention of the world to the unconscious factors that work in the human mind. He also recognised the value of such analytic methods as free association and the interpretation of dreams. He, however, like many other English psychologists, of whom the late Dr. Rivers was one of the most prominent, always contended that it was a mistake to regard the contents of the unconscious to be mostly if not exclusively of a sexual nature. In one of his latest publications, *Psycho-Analysis and Social Psychology*, McDougall regrets that he was not more outspoken regarding the many self-contradictions within the Freudian system. Even in this work, however, he recognised with some satisfaction that Freud stands definitely for a hormic, purposive view of life ; and this good he saw in Jung ; and as for Adler, this was one of the few good things McDougall could recognize in his system, in spite of the fact that " Individual Psychology " has become extremely *popular*.

From his latest works and utterances it becomes clear that McDougall felt rather unhappy that his contributions to psychological thought have not been regarded to be so original or manifold as they deserved to be. For the last fifteen years he chose to live and work

in America, which unfortunately is not an ideal constituency for a psychologist of the type of McDougall, whose outlook was typically British—the psychologies that are in high vogue in the New Continent are *Behaviourism* and *Individual Psychology*. McDougall relentlessly attacked the Behaviourist school, and had a mild contempt for the catchy commonplaces of the school of Adler. English writers always respected McDougall as a first-rate psychologist, but he had to live away from their company. This meant much personal uneasiness, as reflected in his latest writings. Whether psychologists in general estimate his place in the history of modern psychology as high as he himself expected it to be or not, there is no reason to withhold respect from a conspicuous figure in psychology of the calibre of McDougall.

McDougall started his career as a psychologist with some advantages, and he made good use of them. The "frontiers of psychology" are extended. Formerly psychology was a group of ideas derived from individual observation, introspection and speculation—and this is the kind of psychology which he often described as academic psychology, psychology which formed a part—and none too eminent a part—of philosophy and metaphysics. McDougall knew this psychology as much as Locke or Bain or to come to more modern days Stout, Sully or William James. But psychology to-day—if it is not yet divorced from metaphysics—is closely allied to such departments of investigation and study as biology, medicine, physiology in general (and particularly neurology), and anthropology. McDougall started life as a medical graduate, and his writings in general and especially his *Outline of Abnormal Psychology* bear evidence of the advantages he derived from his medical training. For five years during the Great War he was employed in one of the biggest hospitals for mental patients in London, and many of the cases cited in his *Abnormal Psychology* are taken from his direct experiences. He systematically observed the behaviour of such animals as rabbits and wasps, and when he speaks on purposiveness in animals or of the influence of training on succeeding generations of animals, he does not base his judgment on casual observation or speculation. His extensive reading of the writings of such modern authorities as Freud and Jung, Janet and Morton Prince, Lashley and Pavlov coupled with his own first-hand experiences and observations, and his high intellectual and critical ability, enabled him to

assess correctly the permanent elements in these new departures. Add to it the fact that he could write lucidly and almost in a popular style even on very abstruse subjects, and one can easily understand why he is such a great and favourite authority with all British writers on educational psychology. Moreover he was a hard worker and a prodigious writer—in addition to the half a dozen big works referred to in this article, he wrote about a dozen other works all intimately related to his favourite subject, psychology. In all his works he was ever interested not so much in the mechanism or process of behaviour and knowledge as in the dynamic needs and urges of life, especially of human life, and of the organisation of the latter into the unified, wholesome character of an integrated personality.

CULTURAL MIGRATIONS IN OCEANIA

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CULTURE is the historical bye-product as well as an essential characterization of Man. But the history of Man is explored and interpreted with varying degrees of success in the various continents. Through sustained and systematic research Man in Europe to-day is better known than Man in Asia, yet, strangely enough, Asia is admitted by a majority of Anthropologists to be the "cradle of the human race." From Asia by a process of spontaneous or compulsory diffusion the human species reached the other continents. The Heidelberg and Piltdown Man reached western Europe at the Chellean or Quaternary Period of the Geologists. No actual remains of Tertiary Man have yet been found. If with the progress of research such remains of Man's handiwork are discovered those will be attributed to our "elder brother" the Palæolithic man. For the present we are obliged to confine our attention to our own race of Man the Neolithic *Homo sapiens* whose creative activities form the bulk of the culture-history of the upper Palæolithic period. No trace of Palæolithic Man has so far been discovered in the New World and consequently we may assume that the North and the South America have been peopled exculsively by the Eurasiatic race of *Homo sapiens*. Migration of culture from Asia to America in the prehistoric days have been admitted by many scholars. With regard to the continent of Africa, the problem of early Man and his culture is very obscure. But the recent discovery of Rhodesian Man already proves the existence of "an archaic form," as says Prof. Seligman, "which persisted until a few thousand years ago." The Black Race may in course of time be proved to have reached Africa from his original cradle in Malaysia or to have migrated from Africa *via* Madagascar, Andaman and Nicober Islands to the Malayan world.

This momentous drama of the migration of the earliest races of the world was staged on the vast expanse of water extending from the Indian Ocean to the Pacific. Very appropriately, therefore, this area has been characterised by the author of *Man—Past and Present* (Cambridge, 1920), Mr. A. H. Keane, as the Indo-Pacific Domain. British

scholars generally call it Australasia while the Continental scholars name it Oceania which we prefer to adopt. India played a very important rôle in this drama of ethnic and cultural diffusion and yet Indian scholars are not sufficiently alive so far to the importance of this line of research. We hope that our brief and hurried survey of the important centres of Oceania would lead to the widening of our historical perspective.

We may open our survey with the Dark Races who offer at present the darkest problems of anthropology. Prof. Seligman (*Races of Africa*, London, 1930), an authority on the subject, characterises them as the Negro race about whose cradle land we cannot be sure. We can only divide them into a dark wooly-haired tall type and a short Pygmy type (Negrillos-Negritos) who are physically and mentally "infantilistic." Moreover, they are divided geographically also into (*a*) African and (*b*) Oceanic or Melanesian. In this connection we may quote with profit the observation of Keane: "The cradle of the human family lay most probably in Malaysia (Java Man). From this central area of dispersion the first migratory movements ranged North to Asia, West to Africa and East and South over the whole of the Oceanic world by land connections which have since been greatly reduced by subsidence." The black descendants of the Java Man may be admitted to have spread over Papuasia and Australia where they persist in their primitive form and they also penetrated Micronesia and even Polynesia although here the Blacks were mostly absorbed by the latter Caucasian intruders from Asia. The medium-sized or tall type is found in Papuasia while the dwarfish Negro type is found in Andaman and Melanesia. One branch of this race, the Australian, is isolated and threatened with extinction. According to Seligman, "the Australian Race includes the Australians and the Pre-Dravidian tribes of Southern India and Ceylon (Vedda), the Sakai of the Malay Peninsula and probably the Toala of the Celebes." The Jungle tribes of Southern India like Kurumba, Irula, etc., and the almost extinct Veddas of Ceylon are short dolichocephalic races often with prominent brow ridges and noses generally platyrrhine. From the curly hair of the South Indian tribes like Kadir and Panian, Seligman admits the possibility of Negrito influence and Dr. B. S. Guha has definitely identified a few Negrito types in India.

Next to the discovery of the Java Man in Malaysia comes the sensational discovery of the Peking Man in the very heart of the Mongolian

world. According to Keane the original Indo-Malayans, in course of their dispersions during the early Pleistocene age, passed through Malay Peninsula, Indo-China, and India to the Himalayan regions and Tibet whence they may have entered the Mongolian world where the original type came to be modified into Mongoloid family. The late Prof. Arthur Berriedale Keith and a few other authorities on Fossil Man have already tried to connect the Java Man with the Peking Man and the Mongoloid race is now admitted to be the link between the Old World and the New.

Thus the true aboriginal element was represented by a widely spread " Southern Race " extending from Africa to Australia whose primitive culture was totally submerged or gradually disappearing. On this Pre-Malay ethnic substratum was superimposed later cultures of a composite type called Malayan, Caucasian, Indonesian, Polynesian and so forth.

The Malays are a mixed race divided into two groups—(*a*) Oceanic and (*b*) Continental. The historical Malays whose language came to be the *lingua franca* of the Archipelago had their original home in the Menangkabau district of Sumatra and the " Continental " Malays are worthily represented by the highly gifted Khmer races of Indo-China, suggesting the well nigh proved intrusion of the Mongoloid races into the domains of the Pre-Malayan Blacks and as a result of intermingling emerged the present Malay stock which was further enriched by the Fair Indonesians. This mixed stock of " Oceanic or Insular " Malays, according to Keane, is met in the Dayaks of Borneo, the Tagalogs of the Philippines, the Minahassa of Celebes and the aboriginal races of Formosa reaching the very heart of North Pacific. The Mongoloid Malays differed so much from the primitive Caucasian elements here that the latter were named by Logan as Indonesians. These include now all the natives of Caucasian type throughout Oceania. But they belong, according to Keane, to the earlier Pre-Aryan Caucasian (Hametic Iberian) races. They are tall, handsome with Indo-European features who displaced the Black Aborigines or Papuasians. As these Indonesians moved eastwards to their present home in the Pacific specially in Polynesia from Hawaii to New Zealand, their place was taken by the Mongoloid races who intermarried with the aborigines producing the present Malay stock.

The Pre-Aryan western Caucasians were followed by the Aryan hordes and the two streams met and commingled in the North Pacific

specially in Micronesia now under Japanese Mandate. Here we find two intrusions—(*a*) one from the north, that of Megalith builders who passed *via* Japan to Micronesia where they joined hands with the (*b*) Southern branch " who ranged from Indo-China to Malaysia and thence to Polynesia." This hypothesis of Keane would explain the prevalence of the *Marais* and other monolithic structures scattered in the whole Pacific as far as the Easter Islands and culminating in the works of Ponape (East Carolinas) with the Cyclopean walls. No less astonishing is the fact that the Nukuor islanders (Central Carolinas) still speak the pure but archaic form of the Maori language of New Zealand which is linguistically and culturally connected with the Hawaiian in the North Pacific. Cultural exchange between Indo-China and the Philippines is admitted now on the evidence of pre-historic finds and Dr. Beyer, one of the leading authorities on pre-historic remains of the Philippines, is of opinion that some of the Maori stone implements were derived from the Filipino archetypes.

Lastly, some outstanding relics and institutions of Hawaii are traced back to the Kwangtung province and to Indo-China by Dr. E. C. Handy, the renowned ethnographist of the Bishop Museum, Honolulu. Thus we are fairly sure to-day, in spite of occasional gaps and obscurities, that there were distinct Caucasian migrations from the Indo-Malayan Zone, through Indo-China and Micronesia, to the very heart of the Pacific where we find striking types and survivals amongst the Polynesian races. The history of race movements in Oceania could now be traced in broad outlines through five important geographical zones, as we give below, basing on the classification of Mr. Keane:

I. Malaysia: Madagascar, Andaman, Nicober, Malay Peninsula, Sumatra, Java, Borneo, Celebes, Moluccas, Sulu, the Philippines and Formosa.

II. Micronesia: Pelew (Palan), Ladrones (Marianne), Caroline, Marshall, Gilbert, Phœnix group, etc. (under Japanese Mandate).

III. Melanesia: (*a*) Papuasia or New Guinea, Louisiade, etc. (*b*) Bismarck Archipelago, Solomon, Fiji, New Hebrides, New Caledonia, Loyalty Islands, etc.

IV. Australia and Tasmania.

V. Polynesia: New Zealand, Tonga Mangaia, Rarotonga (Cook group), Austral (Tubnai), Society Islands (Tahiti), Tuamotu, Marquesas, Samoa, Hawaii and Easter Islands which is about 2,000

miles from South America. Thus Oceania is " the great insular world which comprises nearly the whole of the Indian and the Pacific Ocean."

Man in Australia

The biggest island in the world as it is, Australia remained like America completely outside our geographical knowledge till their rediscovery by modern European explorers. The appearance of man in Australia and several problems connected therewith are still enveloped in mystery. A group of scholars believed in the nineteenth century, as some of them believe even to-day, that human species there could be traced back to the remote early stone ages. This school of thought was represented by Dr. Herbert Besedow, author of *The Australian Aboriginal* (Adelaide, 1929). He was the state-geologist, the chief medical officer and Protector of Aborigines for the Commonwealth Government in the Northern Territory. Over and above his rich personal experience in Australia, he had, to his credit, intensive researches in the anatomical school of the University of Breslau under the late Prof. Hermann Klaatsch. Dr. Basedow also examined thoroughly the Australian skulls and skeletons in the Hunterian Museum of the Royal College of Surgeons and in the anthropological galleries of the British Museum and other European collections. He admits that most of the evidences have been irretrievably lost, yet much might be " expected from any of the contiguous continents or islands in this region, upon which occur Tertiary or later sedimentary formations. The discovery of the oldest fossil man, the Pithecanthropus Erectus, in Java was by no means accidental." After an excursion to Java he admitted that his knowlege of Melanesian ethnography helped him " to explain the existence of several cults in the northern districts of Australia which border on the Indian Ocean." He reiterates the theory that once a chain of lands linked together Australia, India and South Africa, " the continental masses which in passed eras supplied this link, zoologists have christened *Lemuria* while geologists refer to the lost land as *Gondwana*; it is somewhere within the area once occupied by this submerged continent... .....that we must look for the cradle of the species Homo." This line of anthropological relationship connects the Australian and the Proto-Australian with the Veddas of Ceylon and the Dravidians

of India explaining at the same time the Negroid elements. He sees in the Australian Aboriginal "another palæontological overlap, a living fossil man." He refers to a few survivals in the Pleistocene gravels of the Tennant's Creek district, also in South-Eastern Queensland (Talgai skull discovered in 1884). The new school of scholars, however, appears to be more sceptical and some definitely deny the possibility of identifying the remains of fossil man and his handiworks. Some even consider that, as in New Zealand so in Australia, racial migrations may have taken place in late historical periods. The theories of Basedow have recently been challenged by Keith Word, Campbell, Hale and Tindale in their report on "Fossil Man in the State of South Australia," submitted before the XVI International Geological Congress, Washington, 1933.

But even if we are unable so far to solve the chronological problems, there is no difference of opinion with regard to the unique value of the Australian field for the students of anthropology and sociology: their nature worship, fire ceremonies and legends, the worship of the ancestors, of the sun, moon and the mythical serpent, sex worship and phallic cult, initiation, totemism and totemic diet restrictions, etc., have been exhaustively treated by Dr. Basedow and other scholars. In their religious consciousness we find the Evil Spirit as well as the concept of a Supreme Being existing side by side. There were chances to communicate with superhuman beings, mimicry of animal sounds, song-dialogues, group dances and singing with music-sticks, bamboo-trumpets and skin-drums. Thus on the psychic plane they were fairly advanced although their technical skill was rather poor: stone spear-heads of great variety have been found in North Kimberleys (West Australia) and the aborigines were familiar with both the flaking and chipping processes. Pulverizing ochre for painting was quite common testifying to the development of a distinct school of aboriginal art. A series of rock carvings have been discovered along the coast of New South Wales, Queensland and West Australia. Veritable primitive art galleries have been found in the Flinders Ranges (South Australia). There we find human foot-prints, tracts of Wallaby, Kangaroo and Turkey, and Mr. Basedow observes: "These primitive carvings or petroglyphs of the Northern Flinders Ranges have more than a passing resemblance to the ancient *graffiti* of Egypt." From the animal designs he concludes that the great

lake system of the Australian interier (now a huge desert like Central Asia) once attracted many animals now extinct.

In New South Wales and in Queensland the tribes developed the interesting cult of carving trees and we find thereon intricate patterns, geometrical designs, animal or human forms. Along the north-west coast of Australia where Baobab trees flourish, the tribes carve various designs on the bark and many such bark-pictorial documents have been carefully preserved in the museums of Adelaide, Melbourne and Sydney. Under the overhanging rock-shelters have been found many remarkable drawings, chiefly of animals, in charcoal, kaolin and ochre. Against the black wall we find designs in white, yellow and red pigments. In the cave drawings on the Humbert River (Northern Territory) we find a series of grotesque dancing figures in pipe-clay which material together with ochres were obtained by inter-tribal barter system. Near the Pigeon Hole on the Victoria River (Northern Territory) was discovered admirable charcoal drawings of hopping kangaroos and other animals. The primitive artist manufactured his brush by chewing green shoots of cane. In the body decorations also the different tribes show a remarkable diversity of talent. Generally speaking, these aboriginal pictures are flat and without perspective. But more gifted artists sometimes draw " a real scene from life combining subject with action while environment or surroundings rarely if ever receive attention." Occasionally we notice the combination of two or more figures, human beings appearing sometimes in full, sometimes in half profile. The animal drawings are wonderfully accurate. Effigies of the demi-god often suggest that the earliest tribal ancestors were belived to be animal first and human afterwards.

The most intriguing thing is that among sacred tribal drawings there has been found a human figure fully 9 ft. in length reminding some of the scholars of a crude Buddha type. One cannot be sure, however, as to what kind of external or exotic influences operated on this apparently isolated group of aborigines in Australia. We quote below a significant passage from Basedow's *The Australian Aboriginal* (pages 343-44):

" During an expedition in the northern Kimberleys of Western Australia, it was my good fortune to re-discover several drawings of this type in practically the same locality as that recorded by Sir George Grey, near Glenelg River. One figure was perfect, others were partly

obliterated or incomplete. The best design was in a cave near the top of a prominent bluff the local Worora people call Berrial ; it was drawn in ochre upon a steep face of rock immediately under an overhanging ledge of quartzite. The figure was unquestionably that of a human being, although it measured fully nine feet in length. It lay fully extended, upon its left side, with its arms placed straight against its sides. It reminded one forcibly of a Buddha in a Ceylonese temple. What made the figure seem un-Australian was that it was clothed in a long, striped garment, resembling a priestly gown, from which only the head, hands, and feet are excluded. A loosely fitting belt is also shown. As seems common to all these drawings, the facial features are only indicated by the eyes and nose, the mouth being omitted. Another characteristic, which is shared by all other drawings, is that the head is surrounded by a number of peculiar, concentric bands, through which, and from which, many lines radiate, giving the structure the effect of a halo surrounding the head of a saint."

Mr. C. P. Mountford while not agreeing with Mr. Basedow with regard to the high antiquity of the materials described above has nevertheless given a qualified support to Mr. Basedow's theories (Mountford: *Aboriginal Rock-carvings in South Australia*: Australian Association for the Advancement of Science Proc., Vol. XIX, 1928 ; *A Survey of the Petroglyphs of South Australia*, 1935). While collecting materials for his study of the petroglyphs, Mountford came to know that some native legends recorded from the Northern Flinders and Lake Eyre refer to mythical monsters called Kaddy Makara and he concludes that " owing to the high standard of workmanship in the reproduction of crocodile, rock-engraving has been carried out from times long previous to that period until the recent breaking up of the tribal groups."

Mountford has tried also to explain the meanings of the more symbolic designs like concentric circles, barred circle, straight line markings, fernleaf motif, U within U, and the sun or wheel. He concludes by saying that many of the designs " are similar to drawings made by pre-historic man on the cave walls of Europe, in the Cañyons of the Colorado and in such widely separated places as the Sahara Desert and Tasmania." Mr. Mountford joined the party of the Anthropological Expedition to the Warburton Range (West Australia) organised by the University of Adelaide and the South Australian Museum, which has a splendid collection of ethnological

and artistic materials (Norman B. Tindale, *Oceania*, Vols. 6-7, 1936).

Australian Aboriginal Art: A Select Inventory

The immovable rock carvings and rock paintings apart, there are valuable collection of movable art objects in several museums of Australia and abroad. Thanks to the noble initiative of Prof. A. P. Elkin of the University of Sydney and of his colleague Mr. Frederick D. McCarthy of the Department of Anthropology of the Australian Museum, Sydney,* we have an excellent guide (*Australian Aboriginal Decorative Art*, 1938).

Mr. McCarthy has classified the materials under the following heads:—

I. Eastern Australia: shields, boomerangs, spear-throwers, clubs, carved trees. II. North-eastern Queensland: swords, shields, cross-boomerangs and paddles with incised and painted designs. III. Central Australia and East Kimberleys: weapons and utensils, *tjurunga* (sacred symbols), ceremonial regalia, ground drawings. IV. Arnhem Land and Adjacent Islands: (North Australia) twined baskets, bark baskets, bark drawings, grave posts, weapons, chanting tubes (didjeridu). V. Western Australia: Baobab nuts, pearl-shell phallocrypts and concentric geometrical figures.

The decorative patterns and designs on these objects, when thoroughly analysed and studied on a comparative basis, will form a substantial contribution to our knowledge of aboriginal art. As early as 1894 Dr. A. C. Haddon published *The Decorative Art of British New Guinea*. Recently, Raymond Firth has published an extremely interesting volume on *Art and Life in New Guinea* (1936) which should be read along with the exhaustive survey of *Melanesian Design* (1933) in two richly illustrated volumes by Gladys Reichard. The Geological Survey of New South Wales publishes from time to time special memoirs in its ethnological series. So the periodical *Art in Australia* publishes important articles among which should be noted "Application of Aboriginal Designs" (1930) by Margaret Preston and "Inspiration and Designs in Aboriginal Art" (1935) by Ursula McConnel. But to understand the mind of the aboriginal artist and his social *milieu*, one must constantly refer to the notes and monographs published in the

* The Australian Museum in Sydney is the oldest institution of its kind in Australia. It has valuable collection of zoological and ethnological specimens and a library containing 28,948 volumes (1937). The expenditure during the year 1937 was £18,214 and it counts on a statutory endowment of £800 per year.

valuable journal *Oceania*, edited by Prof. A. P. Elkin of the University of Sydney.

Privileged to examine his collections and to meet some of his colleagues and pupils, I may say that the new group of Australian scholars are inspired by a sincere desire to study sympathetically the cultural documents of the unfortunate aborigines fast dying out.

Prof. Elkin very rightly emphasises the human values in Australian primitive art, as we see from his *Foreword* to Mr. McCarthy's book. For nearly a century the public have been taking interest in the aboriginal cave paintings and rock carvings which belonged to the life of totemism and religion. But the decorations on the mundane objects also belonged, according to Prof. Elkin, to the sacred world of mythology: "These artistic designs, being links with the creative past, are traditional in character and comparatively unchanging in form. The tribal or regional distribution of designs is based on the mythologies and rituals of the tribes concerned. Just as the efficacy of a ritual depends on an exact re-enactment of the traditional form and the chanting of the old songs, even though the meaning of many of the words may be no longer understood, so, too, the efficacy of the patterns on decorated objects depends on the careful reproduction of the motifs if not of the exact patterns, and a knowledge of the traditional song connected with them."

After years of intensive study of Australian social organisation, economics and totemism, Prof. Elkin observes: "We can distinguish but cannot separate the economic, religious and aesthetic aspects of primitive man's life; indeed, we may add his social life; for in some cases the purpose of the manufacture of some beautiful article is the fulfilment of a social duty."

Mr. McCarthy in his excellent monograph reflects a very sane view with regard to aboriginal art: "Each body of primitive art, then, has to be examined in detail in its own cultural setting before comparisons may be made that will offer any valid constructive evidence concerning origins or relationships, and before the question of independent origin or diffusion may be settled."

He draws our attention to the fact that the handiwork of primitive man and primitive art motives have given a fresh stimulus to our modern decorative art, specially of Germany and America. So the International Art Exhibition of Paris (1937) invited specimens of Australian aboriginal art and many of the native designs came to be

utilised by commercial artists. Books on African Negro sculpture already point towards a new field of artistic study. Recently two splendid volumes have been published to enrich our libraries: *Melanesian Design* by Gladys Reichard (New York, 1933) and *Art and Life in New Guinea*, by Raymond Firth (New York, 1936). Some of the Australian designs compare favourably with those of the Papuans, Melanesians and Polynesians. Artistic traditions, no doubt, develop and mature in settled communities but it is no less true that art may also flourish among nomadic tribes like the Australian aborigines, the Bushmen in Africa and the Magdalenian artists of the European old stone age.

We quote below a few salient observations of Mr. McCarthy: " The most distinctive feature of the geometrical art of Australia is the regional occurrence of concentric figures, either formed on a single continuous line, or consisting of separate figures increasing in size from the centre outwards, combined with flutings in various patterns.

" The concentric diamond and circle elements are the most widely distributed motifs, and would appear to be the oldest. To my knowledge no meaning for the concentric diamond has been recorded, although it was probably connected with totemic and spiritual ancestors or culture heroes, and varied in the different localities in which it occurs. Its origin is obscure inasmuch as it appears also in the decorative art of New Guinea, Melanesia, and Polynesia, and in fact, throughout the world. While recognizing the probability of an historical relationship between its occurrence in Australia and New Guinea, it is interesting to consider the possibility of its having been derived in Australia from the grain of timber which it strongly suggests. All the Australian weapons are cut with grain, and, on curved trees, shields, and clubs in the Australian Museum collection, the lines of the graining have actually been used to form this pattern. Further, the repetition of the lines of the grain produces the other associated elements, such as a the chevron and knee-shaped flutings.

" The origin of the concentric circle in Australia is not definitely known. The occurrence of intermediate concentric figures such as ovals, which link the angular diamonds and the circles, suggests the possibility of local development ; but as the concentric circle is common in Papuan and Sepik River art, an historical relationship is more probable between its Australian and New Guinea occurrences. The employment of snakes and snake-like figures in art designs throughout Australia is perhaps due to the universal distribution of the rainbow

serpent belief. Whether the zigzag of Western Australia is stylized example of it is not certain.

"Both naturalistic and geometric forms of art occur in rock carvings and paintings, on weapons and sacred objects, and as personal adornment on the bodies of performers in ceremonies. In some instances extreme stylization of naturalistic motifs has resulted in almost geometrical figures, perhaps as a result of the desire to conceal the ritual significance of the design from the uninitiated. One cannot say, however, that the geometric art as a whole evolved from the naturalistic; the predominant geometric elements cannot be explained in this way."

Museums of Victoria

Next to Sydney, the capital of New South Wales, we find in the beautiful city of Melbourne, the metropolis of the state of Victoria, some remarkable collections treasured in its museums, libraries and art galleries. As early as 1853, the public library of Victoria was founded and the Natural History Museum, also founded at the same period, was located in the grounds of the University of Melbourne. An Art Museum was opened in 1861 to which was added a Picture Gallery in 1864 and a Technological Museum in 1869. The public library is housed in a magnificent building opened in 1913 and is specially well represented in the sections devoted to Art, Music, Australiana, Shakespeariana and History. The Technological Museum exhibits, in the Queen's Hall and the adjoining gallery, Australian and exotic timbers, food products, ores and minerals, metallurgical models and products, agricultural tools, etc.

The Art Gallery is divided into different sections devoted to numismatics, portraits, manuscripts and documents of historical interest. The works of Australian painters are housed in the McArthur Gallery while the Rotunda exhibits the works of European masters valued over £1,74,000. The Print Gallery contains over 5,000 drawings and prints and is one of the finest in the Southern Hemisphere. The Verdon Gallery contains ceramics, glassware, silver, antique furniture, specimens of Egyptian, Greek, Roman, Medieval, Renaissance as well as Modern art-objects. There are also Chinese, Japanese, Persian and a few Indian works of art. Regular classes in painting and drawing are held in the Art Museum with students not under the age of fifteen. The full course extends over five years with day classes and night

classes. There are several prizes and a travelling scholarship of £225 per annum tenable for two years and offered to the best student selected by open competition. Since 1904 over £400,000 have been spent out of the Felton Bequest in acquiring works of art for the National Gallery. The Geological and Zoological collections are also valuable and over 12,000 specimens of Australian fossils make the palæontological collection the finest in Oceania. To the students of Anthropology, the most remarkable collection is that presented to the Museum by Sir Walter Baldwin Spencer, famous for his monumental studies on the Arunta and other tribes. His natural history and enthological collections are displayed in the spacious Spencer Hall, containing over 8,500 specimens illustrating the aboriginal culture: stone implements, fire-making tools, canoes, bark drawings, petroglyphs, ornaments, clothing, baskets, nets, wooden vessels, burial and ceremonial objects; life-size models of the natives are used to depict totemic ceremonies and camp scenes. This kind of representation is also found in the Children's Room which contains various types of human families and copies of the African Bushman drawings. No less remarkable is the Maori collection in the New Zealand Room, showing rare green stone and wooden implement, textiles and wood carvings. Materials from the South Sea Islands are specially valuable because those were collected " before native cultures were contaminated by European influence." There is a huge head-hunting canoe from the Solomon Islands and a big ethnological collection from New Guinea now under Australian mandate.

Western, Eastern and Southern Australia

The value of the Spencer collection of Melbourne could be appreciated when we read that a famous Australian architect observed: " I made numberless drawings from the native implements in the Melbourne Museum which houses the priceless Spencer collection." Mr. Benson earned fame by decorating the Winthrop Hall of the University of Western Australia. While visiting Freemantle and Perth we visited that Hall which best represents the style of Western Australian renaissance. Here, for the first time, the designs of the aboriginal artists and craftsmen were utilized in modern architectural decoration. There is a small Australian aboriginal collection in the local museum. Perth is proud of the first *free* University of Australia,

a unique experiment ; it was organised, thanks to the princely bequest of Sir Winthrop Hacket amounting to £425,000. Founded in 1911-12, the free University of Western Australia began in 1927 to draw the Government grant of £29,000.

Turning from the West to East Australia, we visited the University of Queensland while passing through the beautiful city of Brisbane. Founded in 1910, the University has shown a remarkable growth in course of the last few years and though there is no regular department of Anthropology I had the privilege of receiving much useful information, thanks to the kind courtesy of the Registrar and of Prof. Dr. H. C. Richards who is a recognized authority on the geology of Australia, specially on the problems of the Great Barriar Reef. (Vide *Memoirs of the Queensland Museum* and *Journal* and *Proceedings* of the Royal Society of New South Wales, Vol. 81.)

The anthropological collection of the Museum of Brisbane is quite interesting. The aboriginal tribes of North Queensland and of the Arnhem Land in the extreme north offer problems of capital importance as we shall see later on. (Vide *North Queensland Ethnography Bulletins*.)

These problems have been studied along with other problems of Man in Australia by the expert group of scholars attached to the South Australian Museum and to the University of Adelaide. Coming in personal touch with these scholars and specially with Mr. Norman B. Tindale, I could examine with great profit the splendid collection of the Museum of Adelaide. As early as 1844 Mr. W. A. Cawthrone published, from Adelaide, South Australia, his *Rough Notes on the Manners and Customs of the Natives*. In 1855-56 was founded the South Australian Institute with a museum and a public library. The ground-floor of the museum is devoted to the exhibits of Natural History: mammals, fishes, reptiles with the skeletal restoration of the great Diprotodon now extinct.

The upper floors called the Stirling Gallery of Australian Ethnology are devoted to the various native tribes and their handiwork grouped in separate cases. There is a special collection of the Pacific Island Ethnology. Thanks to the enthusiasm of the museum authorities for aboriginal art Mr. C. P. Mountford, Mr. Herbert M. Hale and Mr. Norman B. Tindale are collaborating to preserve in a systematic way the valuable designs and other art objects of the vanishing race. Recently Mr. Tindale made a brilliant attempt to establish the relationship of the extinct Kangaroo Island culture with the cultures of Australia,

Tasmania and Malaya (*Records of the South Australian Museum*, Vol. 6, No. 1, 1937).

India and Australia

While Mr. Tindale was trying to link South Australian culture with the culture of far-off Malaya, two American scholars, W. W. Howells and W. L. Warner of the Peabody Museum of American Archæology and Ethnology (Harvard University), were publishing in 1937 the results of their anthropometric examination of some of the Australian races (vide *Anthropometry of the Natives of Arnhem Land and the Australian Race Problem*).

They discarded the theories of the Australoid affinities of the Moi of Indo-China and of the Ainu of Japan. After a thorough and scientific analysis of the data so far as available, they came to the conclusion that the primitive Australians were most probably connected with the aborigines of South India, specially with the Veddas of Ceylon. The first home of the Australians was some part of Southern Asia, whence the type reached Australia and Tasmania (probably *via* Malaya) from Timor or New Guinea. The famous Talgai skull discovered in Queensland as well as the Cohuna skull seems to attest to the persistence and antiquity of the Australian type. There was probably a long lapse of time between the coming into the Pacific of these stone age Australoids and that of the Negritos who reached New Guinea but not Australia just as they spread over South Indian forests without reaching Ceylon. Mr. E. A. Hooton, in his *Up from the Ape*, suggests that the Dravidians "arose from an Australoid strain compounded with a white strain, probably of the far-flung Mediterranean type, and not the Aryans of Proto-historic times." The Australoid Veddas also have been modified by some other strain, possibly the same white stock present in the Dravidians. The Australian came to be extinct in almost every realm but his own because of his low potential for survival. Only in the marginal locations—the Bismarck Archipelago, Northern New Britain, New Caledonia and Tasmania—have the Australoids survived intermixing with the Negroids who followed the Negritos.

Thus according to the latest scientific investigators, the Australoid types originated most probably in India and spread into the Western Pacific as the first representatives of the earlier type of *Homo sapiens* in some remote period of the Old Stone Age.

In conclusion, therefore, we may urge that the fascinating study of Human Relations should be developed by the leading universities and learned societies of India. In that study we may at the beginning be baffled by the bewildering variety of problems of pre-historic antiquities and archaeology, of anthropology and philology. But if we persist in seeking light from the history of Man in our neighbouring countries, we may hope some day to reconstruct the ruined fabrics of human civilization. Sometimes the most primitive may appear to be the most significant in explaining the history of cultural migrations, as we realise while following the trends of research in Oceania or Australasia.

THE JUTE SITUATION

DR. BINOY KUMAR SARKAR

THE PROSPERITY ATMOSPHERE

THE day-to-day fluctuations in the prices of jute, raw and manufactured, are normal phenomena and they will continue to affect the businessman's private affairs in the future as in the past. But from the standpoint of the state and the general public it is of some importance to feel that the economic conditions of the country in so far as they are dependent on jute are steadily moving along what may be described as lines of improvement and recovery. Perhaps the greatest single factor among the circumstances contributing to this prosperity tide is to be found in the order of 200 million sand bags recently placed by the British Government.

The prospects of jute must not, however, be treated as hanging exclusively or chiefly on the windfall embodied in the British Government's order. This order has come in really at the head of a rising curve. This has served but to intensify the factors that have been co-operating to produce the prosperity atmosphere in the jute trade.

RISING PRICES

The nadir of depression was touched during 1933-34 when the raw "Firsts" were marketed at the low figures from Rs. 25 to Rs. 29 per bale (compared to Rs. 59-85 in 1913-14). During 1935-36 the quarterly prices were higher fluctuating as they did between Rs. 31 and 38. The level continued to rise so that the 1937-38 figures were Rs. 31-41. By the first week of last February on the eve of the British Government's order the price was round about Rs. 41.[1]

The trend of improvement may be measured by the fact that with 1914 as 100 while the average price in February 1938 was 47 it was 59 towards the beginning of February 1939. This is to be taken in connection with the improvements in the market for jute manufactures. While the index in February 1938 was 61 (1914 as 100) it was as high as 73 prior to the windfall as noted above early in February last.[2]

1 *Review of the Trade of India* (Delhi), 1933-34, p. 255; 1937-38, p. 279.
2 *Monthly Survey of Business Conditions in India* (Delhi), February 1939, pp. 701-702.

The Trend of Exports [3]

To the world's growing demand for jute manufactures is to be ascribed in great part this steady improvement in the jute trade. In spite of the pessimistic interpretations of the Ottawa Agreement the export of bags has risen from 4,151 lakhs in 1932-33 to 6,123 lakhs in 1937-38 (compared to 3,391 lakhs in 1909-14). The export of cloth likewise has risen from 10,117 to 16,431 lakhs of yards during the same period (pre-War average 9,700).

Nor has the export of raw jute an unfavourable story to tell. The Ottawa period has been marked by an increase in foreign takings from 3,153 to 4,186 thousand bales, which almost equalled the pre-War average of 4,281 thousand bales.

Rearmament and Economic Planning

We are to understand that the rearmament programmes of the U. K. as of the other nations are not the sole agencies in the prospects of the jute world. The trends towards improvement have been continuously furnished by the urges for industrialization and industrial reorganization in almost every country of the world since economic planning, planned economy, and economic autarchy of some sort or other came into vogue.[4] The success of the First Five Year Plan in Soviet Russia and the depths of the world-economic depression contributed to the emergence of this complex of ideas about 1932-33. And the jute cultivator as well as the jute industryman have to thank these planning ideas in the main for their pathway upward.

The rearmament or preparedness campaigns may be said to have come to stay although war is hardly yet in sight. The shrewd businessman will not be badly advised if he cautiously forecasts a part of his immediate future on this basis. In the meantime there are two sets of circumstances which need careful watching on the part of the state as well as the public.

Substitutes for Jute

The first question is the caution with which the expansion of substitutes for jute ought to be appraised by the jute trade. About

[3] *RTI*, 1933-34, pp. 233, 235; 1937-38, pp. 239-40.

[4] B. K. Sarkar: "Economic Planning for Bengal" (*Insurance and Finance Review*, Calcutta, March 1933).

half a generation ago these substitutes were treated as mere scientific curios or theoretical eventualities. Today they have gone eminently beyond that stage. Some of the governments in the South American states have enacted measures in order to protect their sisal industry against the imports of jute, raw and manufactured. The Dutch Government has likewise imposed restrictions on the importation of jute products. In the U. S. A. there is no tariff against jute as yet. But experiments in the use of cotton bags as substitute for jute bags are being promoted under Government auspices.[5] Then, again, experiments in the cultivation of jute have made fair progress in Australia, South America, Siam, China and Java. A new fibre plant, *Urena gobata*, is being cultivated in the Portuguese colony, Angola.

Besides, there is the so-called "German fibre" (*Zellwolle* or cellwool) as well as the fibres obtained in German laboratories from straw, reeds, heath and willow. Finally, there is in almost every country an attempt to economize the use of jute by mixing it with flax, hemp, sisal, cotton and other fibres. The use of paper bags is likewise to be mentioned. Altogether, neither the economic theorist nor the businessman of today can afford to think in terms of the jute monopoly of half a generation ago. At the present moment jute is like every other commodity getting to be an article subject to competition from its rivals.

Jute's Fighting Power to be Strengthened

It is not necessary to go into details over all the substitutes of jute. Be it observed, however, incidentally that varied are the new uses to which jute may be put and that new regions are getting industrialized such as may generate new demands for jute. The ground ceded to the substitutes may thus be recovered to a considerable extent. Be this as it may, one is convinced that restrictions to the use of jute are likely to grow in volume and variety in future years on account of the qualitative improvement of the already established and other substitutes. For the time being, the supply of these substitutes happens to be limited in quantity and their prices are as yet not competitive enough. But it may not be long before all these substitutes acquire a favourable position *vis-à-vis* jute on both these counts. Perhaps a decade or so is likely to show substantial developments. But even then the position of jute can hardly be powerfully shaken by that

[5] *Indian Central Jute Committee* (Calcutta), *Bulletin*, April 1939, pp. 7-9, 12, 15.

time. Meanwhile the most vital consideration for the jute-world is to increase its staying power, *i.e.*, to strengthen its fighting capacity, first, as regards prices and, secondly, as regards quality, in competition with the rivals.

Rationalization a Tonic

Rationalization of all sorts in technique, management and marketing with a view to the long-period possibilities in world-competition is the chief tonic that may be administered to the industry at the present moment. There is no ground for any scare however. It should be clearly understood that the trend of exports has all this while been well calculated to render the market quite optimistic inspite of the experiments and achievements in the realm of substitutes. The tug-of-war between jute and its rivals does not bid fair to be short and simple. It is after a long and complicated tussle that the destiny of jute is going to be decided and its more or less normal relations with the other fibres in regard to the adequate share of each in the world market settled.

Autarchy No Damper on Exports

That the situation does not call for any scare in the present circumstances is evident from the second question of vital importance that deserves to be carefully inquired into by the jute-world. This is in regard to the value to be attached to the impact of the economic politics of certain countries. The so-called autarchy or self-sufficiency measures and ideals prevalent in those regions may affect the export of jute, raw and manufactured, from India to a certain extent. But here, again, the facts tell their own tale. An autarchistic customer like Germany has raised her takings of raw jute from 682,000 bales in 1932-33 to 802,000 bales in 1937-38.[6]

The story of Italy, another country inspired by autarchy, also points to the same trend. From 210,000 bales in 1932-33 Italy's takings of raw jute increased to 409,000 bales in 1937-38. Autarchy has not then been a damper on the exports of raw jute.

America's Trade Attitude

One of the greatest markets for India's jute manufactures is the U. S. A. The Indo-American statistics are interesting because they

[6] *RTI*, 1933-34, p. 233; 1937-38, p. 239.

indicate that while in 1932-33 the U. S. A. imported 5,488 lakhs of yards the figure for 1937-38 was 9,540 yards. During this period, be it noted, experiments about the restriction of jute imports had been going on with and without Government support.[7]

Neither in America's factual trade attitude nor in that of Germany and Italy can we find any signs such as should encourage a panicky view for the near future in regard to the economics of jute.

[7] *RTI*, 1933-34, p. 235; 1937-38, p. 240.

SANTAYANA: AN ADVENTURE TOWARDS RATIONAL SCEPTICISM

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AMERICAN critical realists have often been criticised by the contemporary English realists and American functional realists. The criticism is chiefly directed against their theory of knowledge. Knowledge, according to American critical realists, must involve three categories, *viz.*, the knower, the known, and the 'datum.' The knower is the organism with its mental states. The known is the physical object (in perception), or an idea (in introspection). The datum is the character of the object known in perception or introspection. This theory clearly indicates that in knowledge, we do not know the object as such, but we know only the 'character' or 'essence' of the object. What then is the meaning of the 'character' or 'essence' of the object? This leads us to the consideration of the entire situation of the knowledge-relation.

The act of knowledge is a very complex process. It presupposes that there must be an organism with its mental states, there must be an object (mental or physical) of knowledge. Knowledge does not merely mean the cognition of the object, it also involves the factor of the attitude of the organism at the time of knowledge. So the 'data' in perception or in introspection point out 'our' own peculiar knowledge of the object, physical or mental. This at once goes to show that in the act of knowledge our mental states only refer or project our 'data' to the mental or physical object. From this it follows that the 'data' are neither the object of perception or introspection, nor they are mental states themselves, for the latter act as vehicles for referring the 'data' to their objects.

To repeat once more: if the data or essences express both the character of the object and the 'attitude' of the organism in the act of knowledge, they cannot be identified with the 'mental states' which are their vehicles. They cannot also be identified with the objects of which they are mere characters. These characters have their stamp or form of the organism itself. Both the mental states and the physical

objects are said to have an ' existential basis.' But these essences, as reflecting only the character of the objects and involving the ' attitude ' of the organism in the act of knowledge of any form, cannot be said to be existing. This will not only deprive them of their ideal character, but it will also deprive them of their ' ideal function,' for knowledge is after all a spiritual and ideal function. So the belief in them only suggests an adventure towards a spiritual character of our knowledge-function.

The functional realists, like Boodin, Morris, Dewey and others, believe in the fact of the ' symbolical ' character of the ' data,' but they hold that they must have an existential basis in the world of nature, for nature itself functions symbolically. So to hold the data as non-existing, would be to deny this all-pervading function of nature.

Against these thoughts, American critical realists point out that ' data ' can never be held as existing. They are nothing but our ways of adjustments to nature, or to mental events. If so, how can they be existents themselves ? They are projected to the object referred to by them. This is the position of the American critical realists (Drake, Rogers, Santayana, Strong).

In " Essays in Critical Realism " we find seven American critical realists establishing their theory of data as indispensable for the problem of knowledge. We find here that they group themselves into two classes with regard to their views about the data. According to Lovejoy, Pratt and Sellars, the ' given ' or the ' datum ' is ' in toto ' the character of the mental state of the moment, and so is an existent, inspite of the fact that its existence is not given ; but Drake, Rogers, Santayana and Strong hold that as the datum, in most cases, depends on the attitude of the organism, and not simply on the mental state, which is its vehicle, we cannot identify the datum with the mental states. " In other words, the function of the mental state, as well as its actual content, or character, helps to determine what is ' given.' If this is so, the datum is as a whole (the total character given) not the character of any existent entity but, the separate traits that make up its complex nature may be traits of the ' mental existent,' traits of the object known or both or neither (Foot-note, p. 21—" Essays in Critical Realism ").

From this it is obvious that Drake, Rogers, Santayana and Strong hold that ' data ' are non-existent. They have a distinct part to play in the theory of knowledge. We may call them radical critical realists. In this discussion, we shall consider, in brief, the theory of ' data ' as

given by Drake and Strong in their articles in the "Essays in Critical Realism," and shall consider, in detail, the most radical views on the character of 'data,' as given by Santayana, in his famous book "Scepticism and Animal Faith." Drake and Strong are milder, in their atitudes, than Santayana. We must first state their differences in attitudes.

Drake considers the data of perception as 'character-complexes' (or essences) irresistibly taken, in the moment of perception, to be the characters of existing outer objects. In perception the 'data' become one with the object of perception. They can be distinguished only reflectively. This is the case in veridical perception, but it is not so in the case of non-veridical perception, there the 'data' are wrongly 'projected.' But in the case of veridical perception, the 'fusion' between the 'datum' and the object is not perfect, for it is only a character of the object as taken by the organism. This is the scepticism of Drake.

Strong holds the same view of datum. We can put his theory of perception in his own words thus: "Our knowledge requires two things, the givenness of an essence and affirmation—that acting 'as if' the essence were embodied in a real object—and mere givenness is not knowledge." ("Essays in Critical Realism," p. 242.) He holds this view, for, he thinks that such a statement saves one from subjectivism. To hold that the datum is merely the picture of the object and not an embodiment of a real object, would be to dwell in an ideal world. Our knowledge will be subjective. But the element of scepticism can yet be felt in his expression "as if embodied in a real object."

Santayana, being more sceptical in his philosophical attitudes, agrees with none of them. He will not say that the essence is partially like the object, or 'as if' embodied in a real object. He says that an essence never points to existence as it is. It is not in its power to do so. If essence is projected outwards, it is done by animal faith. This takes us directly to his book "Scepticism and Animal Faith." Here we find his philosophic attitude and also his theory of knowledge. Real philosophy lies in rational scepticism, and real knowledge lies in 'Animal Faith.' The human being is naturally moved by animal faith. Animal faith tells him that he is an organism, and the world is lying before him with all its wealth. But experience tells him that what we see or feel is not really the same as seen or felt. The repeat-

ed shocks and disappointments of our life bring in us scepticism. Scepticism is given to us by ' intuition ' which, as Santayana says, is ' a premonition of material fusion.' (" Scepticism and Animal Faith," p. 286.) This is because psyche or organism is in the midst of a vast natural world trying to adapt itself to that world. What gives light to the vague intuition of essences is our spirit or intellectual function of our organism. Our experience, thus, is not through the illumination of the intuition by the spirit, which is but a function of the psyche. Though the experience is the result of the dynamic relation between the psyche and the natural universe, there is enough ground for scepticism. We do not take the things as presented. We do not know ourselves to be completely moulded by the force that is outside us. We take the world as presented to us in our data, that is to say, we take it as we want to take it. There is a ' nature ' in the psyche that operates in every act of our perception of nature, and our experience depends much on our individual attitudes. Our data or essences of objects have in them our ' attitudes ' besides the character of the object or the character of the mental state. We cannot, therefore, say that these data have any existence either in the mental state of the moment, or in the object as presented to us.

As soon as we hold this non-existent character of the data, the room for scepticism becomes very obvious. We may say that the data reveal to us something outside us, but not that thing which is exactly presented to us. It is presented in a modified form. This is the true philosophic attitude. But if, on the other hand, we say that our data reveal to us the things exactly as they point out, we are said to put confidence in our animal faith blindly ; we have not been able to sublimate our animal faith by a rational scepticism. Rational scepticism is not a philosophic denudation, it is not an acceptance of nihilism, it tells us to have a wise and rational belief in our ' animal faith.' It tells us to believe in psyche or organism, and the natural world existing in dynamic relation with it, but it does not tell us to believe in what is revealed to us by our data in all their totality. Complete scepticism is as dogmatic as a complete faith in animal faith.

Too much confidence in animal faith has led to such fantastic theory of the existence of a real entity as ' spirit ' or ' ego ' without a body, or a ' spirit ' in nature influencing us from without. A rational scepticism never thinks of pure spirit, or a spiritual view of the universe. It says that what is spiritual, is not that non-existent spirit or absolute

spirit, it is our knowledge that is spiritual. The intellectual function of the psyche illuminates the vague premonition of the material fusion of intuition, and takes us to the world outside, of which we have an ideal knowledge. The knowledge is given by animal faith. This view of animal faith characterises true rational philosophy or rational scepticism.

Let us now follow the constant fight that goes on between scepticism and animal faith in our reflections of essence, intuition, discourse, experience, memory, knowledge, truth and spirit. In understanding all these, we have to bear in mind the one universal fact that all our experience is the experience of the psyche or living creature that exists in dynamic relationship with the vast natural world that lies beyond it. We shall also mark that our knowledge or experience is the intellectual experience of the forces that operate in us from outside. The electric influences issuing from the natural world, allow our organs to adjust themselves before grosser contact occurs. " Intuition is the premonition of material fusion.....The fusion expresses the initial fusion involved in the distant response, as if a ghostly messenger of oncoming things had rushed like a forerunner into the audience chamber, announcing the arrival. It is only messengers that reach the spirit, even in the thick of the fray; but by lending credence to their hot reports, it can live through the battle, lost in mists and passions, and thinking itself to give and to receive the blows." (" Scepticism and Animal Faith," p. 286.)

From this long quotation, we find that we are first influenced by the electric currents outside us, and the report is given by the intuition, and the spirit or our intellectual function interprets, accepts or rejects the report in its own way. So we find that the psyche has, in the beginning, pure intuition of essences, and then it illuminates it by the spirit or the intellectual function. So knowledge, according to Santayana, is nothing but interpreting, accepting or rejecting the essences of intuition. There is no antagonism between the intuitional and intellectual functions of the psyche. It is not a Bergsonian disparagement of intellect as fitted to matter only, while the flow is not revealed to it. Santayana says that both intuition and intellect are adapted to matter or material forces outside us. They are demanded by our animal life. To live a life of pure intuition, is to live a life of reverie. It is the spirit or intellectual function that gives us freedom

and leads us to a broader life that is outside the psyche, but not outside the spirit or cognitive range.

Let us now consider, in brief, the character of knowledge. To know the character of knowledge, we shall have to know the character of data which give us knowledge. As already said, the data of perception are only characters of objects outside, they are not, in themselves, the material or physical objects. So what can be said of the physical objects, cannot be said of the data. Data, being merely the characters of objects, only symbolise them. As symbols, they are not entities so as to have particularity, or any special peculiarity. They are universal, and they are not of the same kind. Being symbols, they are complete and always positive. As symbols they are not subject to changes of time, they are eternal. They are used by intuition only. They are awakened or raised by intuition. So whenever we take the data in intuition, we do not consider its origin in time, we only use them in that moment for further purpose, *viz.*, to know something outside.

From this we conclude that there is a world of difference between the realm of data and the world of matter that is presented to us every time in the act of perception. There is difference, multiplicity and change in the events and objects of the physical realm, but there is no difference, no change or multiplicity in the essences themselves. Such things appear to us only when we identify our essences or data with objects outside us. We are tempted here to accord an ideal place to this realm of data as Plato did. But Santayana tells us that to give them such an existential realm, would be foolishness or dogmatism. It is a realm of discourse, hence a realm of appearance, as Drake in his " Mind and its Place in Nature " posits.

From our consideration of the nature of essence or datum, we can very well distinguish it from intuition which is but a function of the psyche. But as already stated, intuition, left to itself, is a ' pure intuition,' a ' dream,' a ' reverie ' ; so there must be an ' intellectual function ' to illuminate the dark essences of intuition. This is the entrance of spirit or intellectual function. It introduces discourse. The very fact of discourse also suggests the constancy or duration of the essences of intuition. Without this, the spirit cannot direct its function of attention to them. " The attention as exercised by the spirit is but the manifestation of interest, intent, preference and preoccupation. The discourse is not a play of essences, but it is a play of attention

upon them. So we find here how the essences are used by the organism to suit its purpose. From this it becomes clear that ' experience is a fund of wisdom gatheredby living'! " (*Ibid.*, p. 138.) Experience, accordingly, presupposes intent and intelligence, and it also implies a natural world in which it is possible to learn to live better by practising the arts. (*Ibid.*, p. 138.) A discourse becomes turned into knowledge only when it is interrupted by shocks. " Shock contradicts nothing, but uproots the whole of experience. The lights go out on the stage, and discourse loses its momentum." (*Ibid.*, p. 139.) But yet we are to remember that there the discourse is always kept alive by attention, and that is why it is able to witness and record the revolution of experience. So Santayana takes it as a ' permanent knowledge of the changing.'

The experience of shock is not a passing experience of a moment, it is remembered. So says Santayana: " Experience of shock, if not utterly delusive, accordingly establishes the validity of memory and of transitive knowledge." (*Ibid.*, p. 142.) It establishes realism. " It opens the gates of nature to him, both within him and without and enables him to transmute his apprehension, at first merely aesthetic, into mathematical science." (*Ibid.*, p. 144.) In other words, it tells us to believe in ' experience ' leaving the life of the closed and secluded chamber of our intuitions.

But does this experience of shock reveal to us the outer world directly ? No. It reveals to us first our inner world, *viz.*, the psyche with positive nature of its own. So we quote thus: " Had I not such a positive nature, the existence of material things and the most violent impact upon one another, shattering the world to atoms, would leave me a placid observer of their movement, whereas a definite nature in me, even if disturbed only by cross-currents or by absolute accidents within my own being, would justify my sense of surprise and horror. A self then, not a material world, is the first object that I should posit if I wish the experience of shock to enlarge my dogmas in the strict order of evidence." (*Ibid.*, p. 146.) " The self posited by the sense of shock is a living psyche." (*Ibid.*, p. 147.) But this psyche is surely different from the spirit or the intellectual function. So we can quote his view of the psyche thus: " I, if I exist, am not an idea, nor am I the fact that several ideas may exist one of which remembers the other. If I exist, I am a living creature to whom the ideas are incidents, like aeroplanes in the sky, they pass over, more or less followed by the eye,

more or less listened to, recognised or remembered; but the self slumbers and breathes below, a mysterious natural organism, full of dark yet definite potentialities, so that different events will awake it to quite disproportionate activities. The self is a function of joy, folly or sorrow, a warning and a waning, stupid and dreaming creature, in the midst of a vast natural world, of which it catches but a few transient and odd perspectives." (*Ibid.*, p. 149.)

This long quotation, also, tells us that Santayana's scepticism is not a dogmatic scepticism like that of Hume. It is not a scepticism for the sake of scepticism. It is a scepticism only to gather a right knowledge of the self and nature. This view of the ' self ' is given to us by the experience of shock. The belief in shock establishes also a belief in memory. But it will be mentioned here that memory is not a relapse into the past but a recapitulation of it. This is due to the " intellectual character " of knowledge. We only attend to some past experience. This belief in past experience helps the activity of the psyche. From this we can learn, also, the directness of memory and its ghostly character. The memory also leads us to posit a mind that is timeless so that the past and the present will be grasped in its realm. This is the claim of our intellectual function or spirit. Its function is not limited by space and time. To quote Santayana: " But spirit is virtually omniscient: barriers of space and time do not shut it in; they are but the boundary stones of field and field in its landscape. It is ready to survey all time and all existence if by establishing some electric connection with its seat, time and existence will consent to report themselves to it, for, spirit has no interest, no curiosity, no animal impatience ; and as it arises only when and where nature calls it forth, so it surveys only what nature happens to spread before it. (*Ibid.*, pp. 162-63.)

This only shows that our knowledge of the past experience is ideal. Not only this, our knowledge of the present and future, and of the objects, is also ideal or intellectual.

From our consideration of essence, intuition, discourse and experience, it has been rendered clear that knowledge is not merely an intuition of essences or comparisons of them. " For if I attain intuition," says Santayana, " I have only a phantom object, and if I spurn that and turn to facts, I have renounced intuition." (*Ibid.*, p. 170.) Knowledge presupposes faith in a natural world besides a faith in our own selves. Knowledge is a knowledge of fact. But the belief in fact

is given to us by animal faith. We have to believe in fact so long as the candle of life lasts. This is expressed by Santayana thus: " To turn way from it may be the deepest of wisdom in the end.....but at noon this pleasure is premature. I can always hold it in reserve, and perhaps nihilism is a system the simplest of all—on which we shall all agree in the end." (*Ibid.*, p. 171.)

Knowledge is a discourse regarding a fact. The increase of knowledge only means a better focused, more chastened, and more prolonged attention turned upon what actually occurs. " That is, they are kept closer to animal faith, and freer from pictorial elements and fusion of reverie." (*Ibid.*, pp. 177-78.) So knowledge means going beyond the pure intuition of essences. Thus the progress of knowledge is opened to various directions. The ideal of knowledge is to become natural science; if it trespasses beyond that, it relapses into intuition, and ceases to be knowledge." (*Ibid.*, p. 181.) For knowledge, there is a vast world to conquer. It goes on correcting one experience by another. So knowledge is not possible without a faith in a world of nature. " Faith in nature restores in a comprehensive way the sense of the permanent which is dear to animal faith "..." The world then becomes a home, and I can be a philosopher in it." (*Ibid.*, p. 238.)

Santayana then takes us to his view of ' truth.' He begins like this: " From the beginning of discourse there is a subtle reality posited which is not a thing I mean the truth." (*Ibid.*, p. 262.) So we find that truth is always associated with discourse. The problem of truth does not arise in the case of " pure intuition " of essences, for there the essences are not used in discourse, they are not referred to facts. Truth is not also broached even in pure dialectic which is only apprehension of a system of essences. " Truth, therefore, is as irrelevant to dialectic as to merely aesthetic intuition." Truth comes only in discourse or reflection. It is spoken of a judgment regarding some specific fact. Truth, in itself, is eternal. Its eternity is inherent in it. " All truth—not a few grand ones—are equally eternal." (*Ibid.*, p. 268.) Truth is dateless and eternal, but not timeless, because, being descriptive of existence, it is a picture of change." (*Ibid.*, p. 271.)

The consideration of knowledge, truth and discourse, takes us to the consideration of spirit or intellectual function as given to us by Santayana. Here he points out, against the neo-realists, that mind is not merely awareness or mere intuition of essences, but it is an

intellectual apprehension of awareness or intuition of essences. Pure intuition is ' pure Being,' it is a state of reverie or dream, but when the light of spirit falls on it, it is illuminated, and the organism goes out to understand something that is outside it. The three functions of the spirit, *viz.*, attention, synthesis and perception, take the spirit away from mere intuition to facts outside us. So we might quote: " Perception, intelligence, knowledge accurately transcribe this mode of being, profoundly alien to repose in intuition, or to drifting reverie." (*Ibid.*, p. 283.)

So the intellectual function of the spirit means a reviewing of the pure intuition. It thus helps us to adapt ourselves to the world. It alone signifies that the psyche is plastic. The functions of intuition and intellect unite in contributing to us knowledge. To hold this intellectual function of psyche as substantial, is foolish. To say that there is a pure spirit without a body, is also dogmatic, for, we clearly find that spirit or intellectual function is but a function of the psyche. To quote Santayana once again: " Spirit is, therefore, of its very nature and by its own confession, the voice of something else: it speaks not of itself, but of the father that sent it." (*Ibid.*, p. 285.)

Thus knowledge, according to Santayana, is spiritual, or intellectual. It is never a knowledge of the fact in itself, for, the essence never reveals to us the fact in itself. It is only a symbol, and the psyche utilises this symbol in its great adventure of discovering the mystery of the universe, having confidence in ' animal faith.'

ART AND ARTIST

SUBHENDU GHOSH

"WHOSO touches this book, touches a man": with these words Whitman introduced his great work. Indeed, every great artist puts into his work not bare, depersonalised ideas, but ideas galvanised into life by his personality, almost springing out of it. In art the artist "symbolises" his inner self—his dreams and desires, hopes and fears, anxieties and hysterias—his personality purged and refined into suggestions of exquisite beauty. That is why in art we can feel the warm and enchantingly elusive touch of the artist.

Experience, which is the very process of one's life, experience, whole and entire, both what has been seen and what has been felt in perfect combination is the matter for art—all art. Now what can be more privately and peculiarly one's own than one's experience? All art is, therefore, in a sense deeply personal. It is the depth, the intensity, that lifts up the personal in art to the dignity of the universal. Abundance of vitality—intensity of feelings and emotions—divinely glowing ardour—purge the personal of its dross and what was intimately personal to the artist shines forth like pure gold as a thing of universal delight. Yes, all art is personal, but in a special sense.

Art is the expression of life, but the deepest depths of life baffle expression. It is like the sea: It has no voice save only on the shoals and rocks. Fragments of life must stand relieved to be definitely shaped in the consciousness. Experiences are the fragments of life, detatched from the flow and nourished in the imagination; they are life split-up, as colours of the rain-bow are white light split-up (and white is no colour!). Art expresses not life itself but significant rain-bow-hued experiences. Art binds together experiences, fired and glowing with the heat of some great passion. It is the magic of the heat that unites the fragments and in expression no single experience can stand alone; it may be more clearly relieved than others, which are merely suggested. It is the heat that re-integrates the split-up life. Art creates the illusion of life—an illusion without which the deepest depths of life find no voice.

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Life is knowable only as a series of experiences. When expressed, these experiences have to take on the colour of the mood of the moment. What is this we call mood ? It is some dark force of the subconscious mind. It is, like the heat inside the earth, the heat generated by feelings, desires, emotions and such other " dark " forces working in the subconscious mind. When the mood has a positive concentrated character by virtue of its containing some positive passion dominating other elements in it, it seeks emphatic expression. For the purpose it chooses out the apt experience and brings it into relief. If the expression, *i.e.*, symbolisation, be adequate, there is art, there is living beauty, for all great passion has a beauty of its own, and beauty is more soul-ravishing in the reflection than otherwise.

We have said there can be no great art in the absence of a powerful passion, of life-giving heat. The heat gives art its unity, its wholeness, its universality. Mastery of technique may indeed build up a semblance of unity and there are arts (*e.g.*, music) which are by their nature endowed with the quality of being impersonal. But the unity that mere technique can impose can only be a mechanical substitute for it, and there is a fundamental difference between abstract impersonality and true universality in the realm of art ; what we mean by impersonal nature of music is not in fact abstractly impersonal, if the music is not a soulless combination of sounds. The universal in all art must be intimately personal to any that cares to enter into its spirit.

A work of art is like magic. It conjures up the life ideal—the perfect moments we have lived or we dimly dream of, moments of exalted thoughts and emotions, moments of intense living, in short, moments that give or seek to give life a meaning. The illusion that art creates is a necessary illusion—it is the garb of truth profound, of truth elusive.

If science is man's rationalised experience, art is man's rationalised dream. Man comes to art to relieve his aching soul, to feed his hungry self, to take in the light and heat radiated from a brother man's inner life so that his own personality may bloom, may open its petals.

THE FEUDAL ELEMENT IN FEDERATED INDIA

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THE Federation scheme, in the language of the Viceroy, is to be regarded as " the practical solution of the great constitutional problem of India, *viz.*, the achievement of economic and political unity." This statement one naturally regards not as the personal opinion of the Viceroy but the considered judgment of the British Cabinet. The objection of National India against the inclusion of the representatives of the Indian States in the Federal Legislative Assembly and the Council of State lies in the fact that, up to the present, the British Government has not considered the desirability of trying to meet Indian opinion. All politically minded people had been eagerly looking forward to at least some change in its attitude but they have been grievously disappointed.

The criticisms directed against Federation have assumed various forms and are levelled against it from different angles, with only one of which we are concerned at present. Let me mention only three salient objections here. The first is that the Princes have been permitted to send their representatives by the system of nomination, secondly, that the Indian States have been accorded representation out of all proportion to their population, their contributions to the Central exchequer and so forth and thirdly, the system of indirect election to the Federal Legislative Assembly by British India. So far as the system of nomination is concerned, it is held that, as nominees of the feudal chiefs, the representatives of the Indian States will not reflect the opinion of the real India of to-day. As regards over-representation, it is pointed out that the total population of the Indian States is approximately 81 millions, that is a little more than a fifth of the total population of India. Their contributions to the Federal exchequer are expected to be much less ; in fact according to one calculation it will be about 10 per cent. And yet, in what may be called the Upper

House of the Federal legislature that is in the Council of State, the Indian States have been given 104 out of 260, that is about 40 per cent. of the seats. Similarly, in the Lower House, that is in the Federal Legislative Assembly, there will be 125 representatives of the Indian States in a house of 275 that is 33⅓ per cent.

National India holds that the legislative machinery has been devised in such a way that the nominees of the Indian States with their traditional outlook will ally themselves with other conservative elements and, in this way, hinder the political progress of India towards the goal she has set before herself.

And where will this conservative *bloc* come from? In the Federal Legislative Assembly, we are going to have the system of indirect election so far as the autonomous provinces are concerned. It is held that this would tend to bring into existence a *bloc* of vested interests which will find its natural allies in the nominees of other vested interests like the Princes.

Rightly or wrongly, National India holds that the presence of these three objectionable features namely indirect election for British India, the system of nomination for States representatives and the great weightage accorded to the Indian States point to one thing only and that is that even after the inauguration of Federation, the British will continue to control the economic and political destinies of India but it will be done indirectly and in the name of the Indian nation. It finds corroboration of its views in the Viceroy's statement that "if there is to be a real federation of India, then the collaboration and the participation of the Indian States and the tradition they stand for, are essential." It views with dismay still another statement of the Viceroy in which it was proclaimed that His Majesty's Government decline to bring "any form of pressure to bear upon them (the Indian Princes) to initiate constitutional changes." According to the opponents of Federation in its present form, these facts justify their attitude of suspicion towards this measure.

Ma-Bap Rule

The ideal in India has been that rulers should look after the welfare of their subjects in just the same way and with as much solicitude as parents look after their children. Unfortunately, the lack of reliable data does not permit us to ascertain to what extent this

golden *ma-bap* mentality of the princes has actually manifested itself in beneficent activities aimed at the happiness of the ruled.

It can, however, be safely stated that since the last 150 years, Rulers in the States have not been guided by this ideal. Two States in Orissa have acquired a rather unenviable notoriety by their refusal to provide their people with the ordinary amenities of civilised life. For nearly six months, about 25,000 people of one of these States have been living at Angul in Orissa close to their former homes where they have been maintained by public charity. It is understood that the Ruler in question took nearly three months before he made a statement as regards the conditions under which he was willing to receive them back.

Rajkot is a tiny State in Kathiawar. Not even the semi-official Anglo-Indian press has said a good word for its present Ruler or his administration. His extravagance has made his State almost bankrupt. There is no regular budget, no fixed civil list and the people enjoy little, if any, civic rights. His oppressions have almost maddened his subjects. It has been stated that on one occasion, three thousand men and women fasted for forty-eight hours in front of the palace of their Prince. The nationalist press has drawn a lurid picture of the kind of treatment which they had to endure but into this I have no desire to enter.

Kolhapur, the largest of the South Maratha States, is in no way inferior to Mysore, Cochin or Travancore. But while these States have Legislative Councils with elected majorities, Kolhapur so far as this aspect of the matter is concerned, is far behind them. On the 15th January, 1939, the Maharaja of Kolhapur assured his people that the land assessment would be reduced, restrictions on freedom of speech removed and some other important civic rights announced by the end of the month. But up to the middle of April this year except for a partial reduction in the land assessment, the other pledges had remained unredeemed. Mr. Dinkar Rao Desai, who took a rather prominent part in the popular movement, has asked, " If the Maharaja thus breaks a promise, whom are we to rely upon?" The States people requested the Maharaja to grant political reforms in the State and to secure the co-operation of their representatives. Another resolution urged the Maharaja to limit his private expenditure to 6 lakhs a year. These seem very modest demands and we do not know if they will be granted. It is this playing with the people which is very largely res-

ponsible for those unfortunate misunderstandings which are almost daily widening the breach between the Princes and their subjects.

These instances, taken from Eastern and Western India, are typical of feudal India and do not manifest much of the *ma-bap* spirit referred to above in their Rulers.

In dozens of States, the agitation for responsible government was going on till the other day and it is no exaggeration to say that in almost every case, the people were content with lodging their protest in accordance with Mahatma Gandhi's technique of non-violence. The very few cases where there had been departure from this method merely prove how almost all the people carrying on the struggle are loyal to the theory of non-violence. No man who claims the possession of commonsense would care to condemn this political struggle as a whole merely because there have been regrettable lapses from this technique in just the same way as one would not blame the police as a class of being corrupt because a few among them have been convicted of bribery in courts of law or describe all English soldiers as oppressive bullies because, now and then, we find in the newspapers accounts of the misbehaviour of a few among them.

And how was this situation being met in the States? In the language of one of the States people "Everywhere the answer comes from *lathi* and, now and then, from the rifle." But no intelligent man can persuade himself to believe that repression can be a permanent solution of this very pressing problem. I envisage the day when the people of adjacent States in different parts of India will be driven to combine together in order to put up a valiant non-violent fight against oppression of this type.

The Princes may say that they have the right to the support of the Paramount Power so long as they fulfil their obligations to it. But if, in the absence of concessions, the kind of mass action to which I have just referred does manifest itself, will the Princes be in a position to meet their obligations either to the Paramount Power, or their country or even to their Houses ? After all, their strength lies in the cheerful co-operation of their subjects. Apart from what they get from their people, what are their resources and, if there is a no-rent and no-tax campaign, how long will they, as a class, with their extravagant habits be able to stand the strain ? They should not forget that the prestige, the position and the power they have been enjoying for genera-

tions are derived not so much from the Paramount Power as from their own people.

It is regrettable but none the less true that, to a certain type of the European in India, an Indian is unknowable unless he is a rich and a reigning prince. He is then regarded as a very good fellow specially if he plays good cricket or polo, keeps expensive cars and is a patron of the turf. The misgovernment and oppression which supply him with the finances necessary to keep up his position in European circles are not thought a discredit to him. On the other hand, they are either completely ignored or passed off with a jest. I have serious doubts where the sympathies of a highly placed European official will lie if he has to decide between a graceful, polished and hospitable reigning Indian Prince and a bunch of vociferous, Khaddar-clad, uncouth political agitators voicing real grievances but through ignorance doing it in a manner unacceptable to the European.

No one can doubt that Feudal India which finds its chief support from the British Government will render its loyal support for what it is worth to the powers that be. This is why over-representation to the States under the Federal scheme is held to be detrimental to the political progress of the country and its economic welfare. The nationalists hold that this explains their opposition to the scheme as adumbrated in the Government of India Act, 1935. They say that if Federation suffers shipwreck it will only be on account of the representation in it of Feudal India in an antiquated form. Democratic and Feudal India can never work either in co-operation or harmony. If checks on the too rapid pace of progress advocated by National India are considered necessary, they should take some less objectionable form.

Princes and States Reforms

It has very often been suggested that many of the Princes have introduced reforms in their States and some are contemplating doing so. (In the case of the larger States, there has not been any democratic advance except in those rare cases where this has been forced on them under pressure applied by the people themselves.) On the other hand, there are many States where retrograde and reactionary measures have been introduced within recent years in spite of vigorous protests entered by the people concerned.

Prof. R. H. Kelkar moving his resolution on the need for reform in the Indian States at the last annual session of the National Liberal Federation of India, held in Bombay towards the end of December, 1938, criticised the kind of government which, as the result of pressure, is being sought to be introduced in certain States. This, he declared, is both unsuitable and unacceptable. Dyarchy which had failed after a prolonged trial in British India will turn out an equal failure in the States, the more so because politically they are less advanced than British India. His suggestion for meeting the situation created by the struggle for acquiring civic liberties was that the Princes should immediately grant a good measure of responsible government to their people as proof of their good faith and promise them complete self-government in the near future.

We are all aware how much the liberals of the National Liberal Federation of India have receded to the background mainly because of the somewhat uncritical way in which they have co-operated with the British Government in the past. Politically, they are now regarded as more or less a back number though it would be unfair to forget the very important contributions they made to political progress in the past. They are practically the father of the present militant type of Indian nationalism. Even such a body has been compelled to recognise the extreme necessity of introducing reforms in the States and unanimously accepted the following resolution in their last annual conference.

" The Federation re-affirms complete sympathy with the natural and perfectly legitimate aspirations of the people of the Indian States for civil and political liberties. While deprecating any attempt at coercion to force the hands of the Rulers, the Federation trusts that Rulers of all States in their own interests will concede to their subjects, without further delay, the right of security of person and property, liberty of person, speech and press, freedom of association and an independent judiciary and representative institutions leading ultimately to the establishment of responsible government."

Their demand is a very modest one and it has also been put very modestly, the attention of the Princes being drawn to the fact that the introduction of the necessary reforms is as much to their interest as to that of their peoples. But no appreciable progress has been made for, only the other day the London " Times," regarded by many as

the mouthpiece of the present British Government, said that "the Princes have been exceptionally slow in democratising their States."

Nature of Struggle in the Indian States

National India is of opinion that a majority of the Princes have no desire to change their old and objectionable ways of dealing with their subjects. Probably they unconsciously prove the correctness of one of the lessons of history that when a particular institution has fulfilled its purpose, it gradually loses the capacity of adapting itself to changed conditions and undergoes slow decay till it disappears altogether.

After all what is it that the States people want? Their demand varies from State to State, but everywhere there is absolute unanimity so far as one demand is concerned and that is the demand for responsible government. At the present juncture, there is no universal attempt to enforce this demand. Everywhere the States people desire to organise themselves so that through these organisations when the time is ripe they might make this demand. And yet this right of organising themselves is denied them. Civil liberties are thus crushed and the people are not in a position to carry on political agitation through constitutional methods. Under these circumstances, they must either give up all political activities or have recourse to direct action. Under the leadership of Mahatma Gandhi, this direct action has taken the form of Satyagraha. The issue of the present time in a majority of the States is thus a demand for civil liberties though, it must be admitted, that in most of them their objective is responsible government. No one brought up in the traditions of democracy can refuse to extend to them his sympathy at least so far as this particular phase of the struggle is concerned.

The Princes' Reaction to States Agitation

About the beginning of February, 1939, Mahatma Gandhi published in his *Harijan* an account of a meeting of the Chamber of Princes held in Bombay in which some of them discussed the adoption of a common policy in order to meet the situation created by the agitation of their subjects. It is understood that the meeting was held in camera, but there is every reason to believe that the account given by Mahatma Gandhi is, on the whole, a reliable one.

The Princes were so unwise as to talk about their resources for suppressing all movements for responsible government within their borders and how they would unite for the common object of defending their interests at this critical juncture in the political evolution of India. But they should have realised that a call for unity among Princes may be met by a call for unity among the 81 millions of States subjects. All the resources of the Princes for coercing their people into submission consist of what their subjects have and what part of the same might be placed at their disposal. They should realise that they cannot stir one step without the co-operation of these people and that there is one way and one way only of securing it, *viz.*, removing maladministration, oppression and, in some cases, misrule.

The Princes held that their subjects are not as yet fit for the kind of responsible government advocated by the Congress and in actual operation to-day in British India. In their opinion, it would not be to the best interests of either the States or their people to accord them responsible government at the present moment. The Princes should be responsive to popular demand so far as the removal of some of the more objectionable disabilities is concerned but, in the matter of granting responsible government, they should be adamant. In other words, the policy should be a combination of repression and reconciliation. The exact policy to be followed in each State will ultimately be conditioned by the problem which confronts the State concerned as well as the merits of its individual problem. It is, however, clear from the discussion of the Princes that no political body will be permitted to be organised or to function within the States. The position would be very closely watched everywhere and such associations if brought into existence should be crushed and their activities discouraged in every possible way.

There is a Latin proverb which says that the Greeks are to be feared when they offer gifts. Henceforth reforms when introduced in the States will have to be viewed with suspicion for, if any reliance is to be placed on the proceedings of the Chamber of Princes as reported in the *Harijan*, these will be introduced only to remove the more objectionable grievances of the States people and to discourage their further political progress.

Let it not, however, be forgotten that if the people of the States have learnt anything by this time, they have learnt one lesson namely the lesson of self-sacrifice and the realization of their political

aims through suffering. It is not at all probable that they will be cowed down by any repressive action which may be taken by the Princes as a body. If once mass Civil Disobedience Movement starts, non-violent Satyagraha will be offered by thousands of men and women and ultimately, the Princes will be forced to yield. To withstand the popular demand for the same measure of civil liberty as is being enjoyed by their next-door neighbours in British India will have the effect of creating a gulf between the Princes and their people which it may be almost impossible to bridge over hereafter. It is wisdom's part, therefore, to grant concessions gracefully rather than to wait till they are forcibly wrested from unwilling hands.

Indian Princes and Independence

It may be urged with a great measure of truth that even to-day in all except the most progressive of States, the Indian Princes are trying to retain all, or nearly all, their old privileges and their age-old forms of government. What sort of union is possible between their States and the autonomic British Indian provinces with their progressive and democratic outlook ? If there is a union it will be one between two incompatibles. The autonomous provinces under the Federation subject to the control of the Federal Government in certain matters will enjoy complete freedom. It is but natural for them to look forward to the complete disappearance of the last vestiges of foreign domination. It is proposed to unite them to the States which have their own obligations under the doctrine of paramountcy. Put in a slightly different way, there will be inside Federated India, some provinces cherishing the ideal of independence and working for it while other members or, if another term is preferred, other component parts of the same organisation, will have all their loyalty and affiliation directed towards a far-flung sovereignty. I shall content myself with making a reference to the wisdom inherent in the Scriptural injunction, " Be ye not unequally yoked " and leave my readers to draw their own conclusions therefrom.

National India holds that the British Government, and the Indian Public Services are by natural inclination on the side of the Princes and whenever there is a conflict between the progressive and conservative blocs, it is British India which will suffer. The Princes will act as a permanent drag upon the progressive tendencies of the

Indian nation as a whole. It is therefore that the Congress hopes that the Princes in the interests of India and of themselves should bring the system of Government in their respective States into a line with what is obtaining in the autonomous provinces.

The people of India might dream of independence but they will not be able to realise it. The Princes now depend not so much on the loyalty and affection of their people as upon the British army for their existence. It is this which secures their immunity against any local disorder due to their acts of injustice and tyranny. Similarly, they are safe from external aggression. All this makes it perfectly safe for them to lead a life of sloth and physical enjoyment. Any movement for independence would imply either their total disappearance from the scene or, in the alternative, their retention in the rôle of constitutional rulers. The Indian, if not the British, is aware how very few of them are fitted by nature, inclination, ability or training to act as constitutional rulers. If so, why has the British Government found it necessary to provide machinery to guide and advise them? These people in their own interests are bound to oppose tooth and nail every move calculated to bring about independence and this is one of the reasons why National India looks with suspicion on the inclusion of the States within Federation in the form provided in the Government of India Act, 1935

Treaty Obligations

Apologists for the Princes have of late been emphasising the inviolable nature of the treaties entered into between them and the Paramount Power. We are to-day seeing what is happening to international treaties and the most sacred of covenants when they stand in the way of expediency. Such treaties have been totally ignored and friends and allies most shamelessly deserted in their hour of direst need. In all these cases, democracy and freedom were the victims.

National India does not admit that these moth-eaten treaties which might have been entered into more than a century ago should be allowed to stand in the way of the enjoyment of ordinary civil liberties and responsible government by the people of the States. It is foolish to expect that people will continue to hug to their bosom the shackles of slavery put on them by force or fraud generations ago to remain permanently under a system which is slowly grinding them down to the dust.

Taking the most serious view of the matter what is it that is meant by treaty obligations? They imply good government on the part of the Ruler concerned, payment of tribute if any, embargo on entering into any kind of treaty with any foreign government except through the agent of the King-Emperor, military assistance against foreign aggression and serious internal disorder and interference by the agent of the Crown in case of grave misrule. It has to be admitted that the British Government is even now tolerating government in some of the States which is admittedly far from good from the standpoint of the interests of the people. And the kind of government permitted to exist in some of the States is objectionable to an extent that is scarcely possible under any form of popular government.

This state of things has to be remedied. Neither the people concerned nor the Indian National Congress are likely, when matters come to a head, to object to the reservation of powers by the rulers and the Crown whenever popular rule breaks down or is likely to break down in any of these directions. Treaty obligations or not, the feudal system of government must go and make room for a democratic form of government.

Intervention by the Paramount Power

Both the Under-Secretary of State for India and the Viceroy have definitely stated that the British Government will not exert any kind of pressure upon the Princes to introduce responsible government within their States. This compares rather oddly with what Lord Curzon said about thirty years ago when he clearly laid down the policy he meant to follow, namely, that the Princes must not regard their States as their private property but must discharge their responsibilities towards their people. The Under-Secretary of State had, however, to admit on behalf of the British Government "that the obligations of the Paramount Power to the States extend to advising and assisting Rulers in remedying such legitimate grievances of their subjects as may be found to exist." Continuing he said that His Majesty's Government would not put any pressure upon them to initiate constitutional changes.

The mere layman would detect an inconsistency between the two parts of this statement specially if the accepted obligation is interpreted in a liberal spirit by the Paramount Power. If as the Paramount Power, the British Government regard it as their duty to advise and assist the Rulers "in remedying the legitimate grievances" of their

people, what justification can there be for not using moral pressure on the Princes to remove some of the most oppressive grievances under which the people suffer ? And these are lack of civil liberties within the States, arbitrary powers of the Rulers to deal with their subjects and their revenues in any way they like, and the utter absence of any kind of control by the people over the administration of the States. Why does not the British Government regard them as " legitimate grievances " and if so, why should it show any hesitation to do its duty as trustees of the Princes as well as of their subjects ?

Political India has not, however, failed to read its own meaning into the award of the Chief Justice of the Federal Court on the Rajkot document. From this point of view, the question of the victory or defeat of Mahatma Gandhi in the matter carries no significance along with it. The first thing is that the Mahatma has been instrumental in submitting to the Federal Chief Justice's judgment a matter in which there was a difference of opinion between an Indian State and the Congress High Command. By having recourse to one Federal authority, he has prepared the way for the acceptance of Federation. This of course is the Leftist view which is dead against Federation.

The Rightists argue that India's Chief Justice was not asked to pronounce his verdict on a political dispute. He had to give his interpretation of certain words as they appeared in important state documents. Mahatma Gandhi had repeatedly asked the Paramount Power to intervene and the Representative of the Crown did nothing but right in seeking technical assistance, in other words, an authoritative interpretation of the matter at issue from the most authoritative official source available.

Whatever our political views, we have to remember that the Representative of the Crown had to intervene and the Chief Justice of India did pronounce his verdict on a certain matter concerned with the relations between an Indian State and the Paramount Power. From this does it not follow, though it may be indirectly, that though the Paramount Power is unwilling to interfere in the affairs of the States, it has not renounced altogether its fundamental rights in this direction and that the time may yet come when it will have to clarify its position still further by doing something to induce the Princes to introduce responsible government in their States ?

News and Views

[A monthly record of News and Views relating to Cultural and Academic Institutions, Events and Movements in India and Abroad.]

Free Primary Education in Bengal

The introduction of free primary education is one of the major problems before autonomous Bengal, on the solution of which depends the future of the province. The magnitude of the task can be well imagined from the fact that in one district alone, although 2,408 schools have been opened, this number is considered inadequate.

This refers to the Mymensingh district where the free primary education scheme has already been introduced; and it must be remembered that there are many districts in Bengal.

A member of the Bengal Legislative Council urged upon the Minister for Education the necessity for maintaining the old aided primary schools as, according to him, the number of free primary schools so far opened in his district fell far short of requirements. The Minister, however, stated that the number of schools was adequate to meet the requirements of any locality. He explained that schools had been selected on the results of a survey of the educational needs of the district and re-organization and adjustment of primary schools were made with the local survey sub-committee set up by the District School Board, one in each of the 20 sub-inspectorates, on the lines of the Government scheme, *i.e.*, at least one Board-managed school for each unit area of 3·14 square miles, or a population of 2,000.

As a result, survey sites were selected for 2,634 schools to serve the needs of a district which has a rural area of 6,192 square miles and a population of about 5,000,000. This number of schools was required so as to enable a child to attend a school within an average distance of one mile from his or her home. Of these 2,634 selected schools, 2,408 had already been opened and steps were being taken to open the remaining 226 at an early date. The old aided primary schools had been either amalgamated with the central schools or abolished, as there appeared to be no necessity for maintaining them.

There was overcrowding in some of the free primary schools, but to cope with this, provision has been made for appointing additional teachers in proportion to the number of pupils. New schools cannot be opened for want of suitable land and housing arrangements.

The free primary school survey committee have not made errors of a serious nature in selecting proper sites, but in cases where their selections had been found unsatisfactory, the local authorities had taken action to remedy matters.

Dr. Montessori

It is learnt Dr. Montessori has agreed to visit India in October next. She would be spending about six months in this country and during the period she intends to deliver lectures before Universities and other learned bodies.

Dr. Maria Montessori, it may be recalled, was appointed in 1931 a Reader of the Calcutta University to deliver a course of lectures on the subject of her educational system. But the University was subsequently informed by the Honorary Secretary, Montessori Society, London, that the proposed course of lectures had been indefinitely postponed.

Fish Exhibition

To create a larger interest in India's edible fishes the Zoological Survey of India arranged an exhibition of the principal edible fishes of Calcutta in the newly constructed fish gallery at the Indian Museum. Stuffed specimens of as many as 28 varieties were shown in the gallery.

Attention was drawn to the fact that the available supply in Calcutta was far from sufficient and that only a small percentage of the total quantity offered for sale is from local fisheries. Most of the fresh water fish are imported from southern and eastern Bengal and the Chilka Lakes; the estuarine fishes come from various parts of the Gangetic delta; while the marine varieties are imported from Puri and other seaports.

The exhibits reveal the great possibilities of the fishing industry in Bengal if properly developed.

Calcutta Blind School

It is not perhaps generally known that the Calcutta Blind School is doing excellent work among the afflicted children both intellectually, industrially and physically.

In the literary section ten pupils—seven boys and three girls—reached the High School standard. One boy appeared at the Matriculation Examination in March, and a boy and a girl will appear in November next. On the industrial side, basket-making and cane weaving are the staple industries and the quality of production is well maintained. In addition there are gardening, building and nature study. The music section has trained many students as musicians or music teachers. Besides classical music, the syllabus consists of modern Bengali songs, caricature, mimicry and dancing, thus giving the pupils a good grounding for the stage or cinema as play actors or social entertainers.

Much attention is paid to physical education which is carried on more on individual lines. Drill, gymnastics, swimming, rowing, long walks and games also help to improve the physique of the children.

Adult Education Scheme

The Adult Education Scheme inaugurated by the Calcutta University Institute to train volunteers to educate adults in their respective villages during the summer vacation has, so far it is understood, been very successful.

About 400 volunteers were trained for this purpose and were recently given an enthusiastic send-off. Each volunteer was supplied with a packet containing twelve sets of certain books, namely, *Parar Bahi*, *Barader Para*, *Hishaber Bahi*, a handbook of instructions for opening an adult education centre, and a pamphlet containing articles on rural health, hygiene, civics and other allied subjects.

As this was the first year of the campaign it was arranged that each volunteer should open in his village a centre for 12 adults. So great, however, was the response that it was impossible to supply an adequate number of books to the volunteers who had to be reminded that the campaign was limited in scope and that their activities had to be restricted accordingly.

Military Training for Cawnpore

On the invitation of the Cawnpore District Board, Lt. M. H. Naqui, Sub-Deputy Inspector of Schools, has submitted a scheme for imparting Military Training to pupils over the age of 14 studying in Cawnpore District Vernacular schools.

Miscellany

ECONOMIC ADAPTATION TO A CHANGING WORLD MARKET

The changes in demand and supply are well-known categories in economic theory. Their impacts on economic structure are no lsss important in business practice than in scientific considerations. Economic dynamics is indeed the great reality known to the man in the street. And to-day *homo oeconomicus* is fully conscious in daily transactions that economic activities, dynamic or fluctuating as they happen to be, are fundamentally hemispheroidal in dimensions, nature and origin. Naturally, therefore, the orientations to the world economy—attitude to the agricultural, industrial and financial developments in the world from China to Peru—have grown into the most commonplace preoccupations of the merchant, the banker, the farmer, and of course of the satatesman and the." planner."

It is with these adjustments or readjustments of the industrialist, the financier, the businessman and the economic statesmen to the morphological transformations of the world economy—the international re-localizations—that Carl Major Wright of Denmark addresses himself in *Economic Adaptation to a Changing World Market* (Copenhagen, Ejnar Munksgaard, 1939). A most fundamental consideration with the author is then the transfer of capital and labour from the old to the new enterprises. The problem evidently is not merely one of the " private economy," as known in continental science. From the standpoints of national economy as well nothing is more important than this question of the deflection of resources from one channel to another.

The influence of changing income on a group's consumption of certain commodities has been examined at length and the " income elasticity coefficients " exhibited on the strength of recent studies in consumption and standard of living carried on in several countries. The universality of Engel's law is proved to be open to question. The problem of hours of leisure as affected by income elasticity deserves to be gone into with equal care.

An instance of economic transformation is furnished by the appearance of new products which are not directy competing with already existing products but largely satisfying so far little developed wants. Among consumers' goods Wright mentions electrical, household and medical apparatus, refrigerators, gramophones, cosmetics and artificial silk goods as yielding between 1,680 to 340 as the percentage of 1928 in relation to 1913. Some of the producers' goods belonging to the same categary are wireless sets, printing paper, accumulators, batteries, motor cars and telephone accessories with 6,200-370 as the corresponding percentages. Such realistic studies, if carried on with the data of Asian countries, would not fail to indicate the socio-economic structural changes going on in this part of this world as well.

The question is whether capital supply is influenced by the interest level and how it has engaged Wright's attention so that he is convinced that it is incorrect to look upon interest exclusively or chiefly as an income. One of the great realities of practical life cannot be ignored in this connection. Corporations, central and local governments and social insurance institutions are some of the principal agencies of capital-building. The

interest that they have to pay out is more often an expenditure than an income.

For countries like India economic statesmen may accept Wright's proposition that although the industrialization process is more rapid in the new than in the old countries, their trend of industrial development runs parallel with the earliest development in the old countries. This indeed is the conclusion of the "equations" to which the present reviewer has been led in two volumes of *Economic Development* (1926, 1938). In this connection the concluding chapter which is given over to the "Adaptation Problem in Bulgaria" should be eminently suggestive. Wright is convinced that even a poor country like Bulgaria is generally itself able to provide the additional means necessary for adaption to new conditions. India's experience would confirm Wright's thesis that industry offers possibilities for new adaptation as soon as the heavy burden to which it is subject becomes somewhat alleviated or some outside event gives it an unexpected stimulus.

Business cycles constitute the most conspicuous features of economic transformations. In his chapter on "Business Cycle Policy" Wright quotes the Dutch economist, Tinbergen, who has made an investigation into the effects of different kinds of state interference, first, on the national business cycle, and secondly on the balance of payments.

Wright's work combines statistical and factual material about international capital movements, migrations, prices, employment, etc., with analysis as well as generalizations. The data used are mostly continental. He has utilized the sources quite liberally and quotes or summarizes them with adequate details. The study possesses altogether the merit of being a practical handmaid to economic planning as well as a contribution to the theory of economic dynamics.

BENOY KUMAR SARKAR

REALISM MULTIPLIED BY MYSTICISM IN HOCKING'S PHILOSOPHY

William Ernest Hocking, observes in his *Types of Philosophy* (New York, 1930) that we must treat things in the day's work as if they were independent, naturalistic, over against us and against us, or at least, not for us Struggle to build a human habitation in the midst of an alien universe ; unremitting effort to expel by the aid of science whatever is evil from our point of view ; expecting no good from the universe except what we human beings construct in the face of nature and except the universe itself: and admitting no wrong as inherent in the constitution of things:—this is the programme in which we join the realist.

But who has the eye for this humanistic work, and the endless patience and energy for it, in view of the fact that the task defined is nothing short of infinite ? Who can wait until the end of evolution for an achievement which only remote posterity can ever see ? Only one who in some way already is at the goal, as the mystic is (who for us represents the religious spirit).

Hocking's position is that of a realist multiplied by idealism or mysticism. Indeed he describes himself as an exponent of mystical realism in which the realism is a "*transfigured naturalism* which enlarges physical nature by making it a province within a greater nature."

It is only the mystic-idealist who is justified in exploring all the " hard facts ' and facing all the risks of a naturalistic system of experience, neither defying them nor running away.

Humanism, pure and simple, is criticized by Hocking as follows:

To fix our mind upon the human interest is to lose the best things that have come to mankind. These have arrived by way of love of art or of science, as we say, for its own sake; with humanity relatively out of the focus. How can you do good to individual men, each of whom contemplates eternity, unless you yourself contemplate eternity? Consider a man as a group of instincts hailing from animal ancestry, best understood by looking backward, and you can do him a limited account of good, and that at the cost of his humiliation. Consider him as a group of impulses tending forward to a will to be immortal, and you find material interests taken care of as incidents. Humanism can be fulfilled only in a world that sustains the zest of doing one's human job as a religious observance. This can continue only if the world is worth that kind of devotion. Humanism depends on a transfigured naturalism which is idealism.

In Hocking's appraisal human life as we find it, is not free, sacred, immortal. It must be made free; its sacredness must be conferred upon it; its immortality must be won. In these respects we are the creators of our own destinies: even beyond the humanistic limits, the world of our destiny shall be what we believe and make it.

The realistic mystic or mystical realist in Hocking expresses himself in the following manner in *Thoughts on Death and Life* (New York, 1937):

" To be able to give oneself wholeheartedly to the present one must be persistently aware that it is *not all*. One must rather be able to treat the present moment as if it were engaged in the business allotted to it by that total life which stretches indefinitely beyond."

" We must be realists in action, definite, analytical, responsible, critical, separating good and evil, refusing to palliate or be reconciled to the violence, cruelty, and callousness of the world, concentrated on the task on hand and its object as if they were all-important, as if experience were to have just such value as by these efforts we can extract from it and no more."

But there is another side in Hocking's evaluation.

" And then, when through the very vehemence of our concentration the value and sense of what we are doing leak away from it, as tends to happen at the end of every day's work, we must become mystics in order to renew that sense of the whole which can shed its value down again on the parts. We have to recover, by some art or other, what Mencius called our " child's heart " and what Lao Tze called *Tao*, the nameless simplicity of being and outlook which confers proportion, unity and wholeness upon the distraught fragments of endeavor. These are but other names for that aboriginal hold on ultimate reality which, the mystic rightly says, is inalienable from human selfhood."

Such idealism in the service of the real is as, we have seen on other occasions, a marked feature of Hocking's political ethics as propounded in *Man and the State* (New Haven, 1936).

BENOY KUMAR SARKAR.

Reviews and Notices of Books

Rome: Republic and Empire. Vol. II: The Empire. By H. W. Household, M.A. (Oxon.). Published by J. M. Dent & Sons, Ltd., London. Price 3*s*. 6*d*. net.

In this neat little volume Mr. Household continues his efforts to retell in his attractive style the story of Rome, Republic and Empire, from the murder of Caesar down to the fall of the Western Empire in 476 A.D. As in his earlier volumes he "draws largely upon ancient authors" to make his description of men and events really vivid and his success to an extent in doing that is beyond doubt. It may be an exaggeration to say, as has been claimed in the front flap of the wrapper, that through his efforts, "Rome comes before us a living community as actual as the life of our own times," but at the same time it must be admitted that his narration evokes in the reader an interest for the subject, which prompts him to wend his way through the maze of this most difficult period in history, down to the very end of this volume.

However, in reviewing this small volume, one cannot help feeling, inspite of the author's attempt to tap the original sources, that it is more the work of a literary man than of a critical historian. Something seems to be lacking in the character sketches of Augustus, Trajan, Hadrian and such other eminent men who have been dealt with in this volume. From a perusal of it, it becomes difficult for one to form a critical estimate of the achievements of the great figures of this period. Their importance in the history of Rome gets lost in his narration of the many intrigues for political power, in his description of countless battles, in his stories of numerous murders. Mr. Household to an extent suffers from the same defect that he noticed in Suetonius' Biographies. Like him he gives us many anecdotes and gossips with no bearing on the history of the period. Thus the stories of Sejanus' intrigues might have been disposed of in a paragraph; the perfidious cruelty of Caligula need not have been illustrated by an anecdote from Seneca—the details, which have been furnished of many of these atrocities would have served the same purpose. Such instances can be multiplied.

When I opened this book I had a fond hope that perhaps this book would solve our difficulty in finding a suitable text-book of this period for our students. But my hope has not been fulfilled. Apart from increasing the bulk of the book with unnecessary details and stories and apart from its general uncritical character, it contains anecdotes and information which a text-book for immature young people should not possess. Thus the story of Caligula's consorting with his sister or the story *re* the divorces of Augustus or the indelicate hint that "Augustus was perhaps the father of Drusus, though Nero owned him" has no place in a text-book of history meant for young people.

Inspite of these drawbacks I believe that this volume will appeal very much to those readers who want to pick up for the first time an acquaintance with the history of this period without being bored by a too critical, matter-of-fact atmosphere, which pervades for example the history of the Peloponnesian War of Thucydides.

S. B.

Nadir Shah. By L. Lockhart. Luzac & Co., 1938.

This is a very valuable work for those interested in Persian and Indian history. In this volume is narrated in great detail the romantic story of the shepherd boy who overthrew the Safari dynasty and became the master of Persia, conquered Kandahar, Ghazni and Kabul and overran India. Nadir Shah was one of those scourges of humanity who have from time to time, like meteors in the sky, appeared in the firmament of history, as if from nowhere, brought ruin and devastation to nations and altered the destiny of empires. He has not only left his mark in the history of Persia but by contributing to the downfall of the declining Mughal Empire altered the history of India.

As a general and a conqueror Nadir Shah is in the direct line of such supermen as Alexander the Great and Napoleon. But he lacked their administrative capabilities and width of political outlook. There are more points of similarity, as the author points out, with Tamerlane. " Both Timur and Nadir," says Dr. Lockhart, " were men of little education..... they each had unusually retentive memories. Both were intensely ambitious and adventurous and were possessed of real military genius; lastly, both were merciless to evil-doers." But there are important points of contrast. " Timur exerted himself to encourage trade and industry, and sought by means of his conquest to open up new trade-routes, Nadir paid little attention to commerce and had no thought for the economic welfare of his subjects. Secondly, Timur strove to further the spread of Islam, but Nadir took no such action....."

India remembers Nadir Shah as the man who sacked Delhi, carried away the Peacock Throne together with immense treasures accumulated by Mughals in nearly two hundred years, and bled her white. The career and character of a man who to contemporaries must have been like the memory of a nightmare cannot fail to interest Indians for generations.

Dr. Lockhart is a person eminently suited to tackle this important biography. A first class Cambridge graduate in Oriental Languages Tripos, he also served a long time in Iran and acquired an intimate knowledge of the country, its people and its language. With this equipment he has applied himself for years to the study of this subject and gone into a vast mass of material, original and secondary on Nadir Shah and his times. The result has been a reliable and comprehensive work on the subject.

A. P. D.-G.

Oxford Economic Papers, October, 1938. Clarendon Press, Oxford.

This is the first number of a serial publication, primarily intended as a channel for publishing the results of research work in economics carried on in the University of Oxford. It contains five articles, all of which will be found useful by the professional economists. The first article, " The significance of the Rate of Interest " by Mr. H. D. Henderson, is particularly interesting as well as instructive. The second article is a summary of the replies given by business men to the questions addressed by the Oxford Economists' Research Group regarding the actual influence of the rate of interest on business activities. The third is an attempt to construct an Index of the physical amount of goods and services traded between 1919 and 1936. In the fourth article Mr. A. J. Brown attempts to see if the " liquidity-preference schedule " of Keynes can be used as an instrument

of statistical analysis. The fifth and last deals with a tentative statistical measure for mobility of labour.

The last three articles are statistical and may not be intelligible to the general readers. But they will certainly find the first two articles easy-reading as well as stimulating.

How Shall We Define Luxury ? By G. R. Agaskar, B.A., LL.B. Bombay, 1938. Price Rs. 4-4.

The author jots down here a lot of his crude economic thinkings, with the main object of defending the capitalists against the attack of the socialists. Capitalists are not responsible for the poverty and unemployment, either of "the educated" or of the masses. Poverty is due to "the paucity of food-stuffs," clothing and other necessities. The solution of poverty as well as unemployment "really and truly lies in the production of essential Luxuries and necessities." The solution of unemployment "lies not in finding employment for the unemployed, but in providing luxuries for them." Herein the author finds the noble rôle of the capitalists. "Do not frown on them, do not be jealous of them, do not look down upon them, but rather look at them as saviours. It is they who have the means to turn their attention to the production of additional products or wealth, and by doing so, give employment to the unemployed."

So the author advises: Produce more—more luxuries and semi-necessities, for people's demand for things like food is limited by the capacity of their stomachs. And the author is sure that this additional product "must find its way" to the poor. How ? He does not know : "the economists be best left to work out how it will tend to do so."

The learned advocate-author blissfully forgets the fact that under the present system of production, no private capitalist, even amongst his "noble-minded" ones, can normally produce little or much, unless it promises him adequate profit. Nor does his mind turn to the question: Why is it that production and employment have to depend on the capitalists ?

The author's thoughts are economically immature, and expressions dull and boring.

P. C. GHOSH

Reality and Value. By A. Cambell Gamett. George Allen and Unwin, Ltd., London. Price 12*s.* 6*d.*

"An introduction to Metaphysic and an essay on the Theory of Value," the work aims at a new interpretation of our normative experiences against a background of metaphysical realism and a voluntaristic conception of the self as will to active self-expression. The first half of the work is mainly epistemological and is intended, according to the author, as a preliminary to the psychological analysis of value-experience which occupies the main body of the second half. In the Preface the author describes his position as "a type of Critical Realism akin to the views of Kemp Smith, Stout and Whitehead." The author's epistemological views may be stated briefly as follows :—

Experience is bipolar involving an experiencing subject and an object of experience. To explain the objective aspect of experience we must posit a threefold non-temporal objective continuum which (following Whitehead) we may call the Eternal Object. The threefold objective continuum of the Eternal Object comprises undifferentiated space, undifferentiated sense and undifferentiated value. Time as " the mind of the Universe " differentiates the objective continuum into space-time, sensa and values. Time operating in space gives rise to space-time which is the stuff of the material world. Operating in living beings time is space-free and is then known as Mind. Time, however, does not account for the order in the world. Time explains the diversity, while the order in the physical world which appears as increase of entropy may be explained as being due to space. But besides the order in the physical world which appears as a tendency to disintegration, we have a different kind of order manifest in living beings and minds. It is the order which we recognise as the constructive tendency of life and mind and which we distinguish as teleological. To explain this we must posit yet another non-temporal factor which we may call the Eternal Agent or Eternal Will. Both in space and in life and mind, time may be conceived as an expression of the Eternal Agent. In space the expression of time is relatively rigid, is responsive only to other space-time, and appears as a tendency to expansion without limit. It is otherwise, however, in life and time. Here time expresses itself as non-spatial, as constructive or integrative and as responsive not only to space-time but also to sensa and values. "When the eternal form of will gives expression to itself in temporal process, this process, operating in space, becomes *motion* ; expression itself upon space-time, and responding to sensa and values, it is *conation*. Thus time transforms the abstract Form of Will.....into a self or selves.....It is time, the Mind of the World, that transforms the Eternal Object into minds and the things they mind."

Space, sensa and values are the qualities which the time-process differentiates into their various forms. Space, apart from time is a mere potential: it is concretely realised as space-time. Time in its more complex operation as mental activity not only realises space-time but also sensa and values. Sensa together with space-time constitute the objects which function in the presentation of values. Thus we come to speak of space-time as primary quality, sensa as secondary qualities and values as tertiary qualities. The three qualities constitute the whole world of our experience, but our world, the author adds, is always a particular perspective, *i.e.*, existence selected and arranged from a particular viewpoint. Hence the values belonging to the world from a particular perspective may look different in a different perspective. Every perspective, however, requires interpretation if it is to guide actions required to change the perspective in a desired way. Such interpretation implies an understanding not merely of the details conditioning the particular perspective in question but also of the general principles governing its type or kind. A general theory of value elucidates these broad, general principles involved in the interpretation of every value perspective. An analysis of the conditions of value experience, the author adds, must not be taken as an explanation of the values themselves. " Values are objective. They are differentiated by our conative activity from an objective value-continuum. There could be no common ground in our value-experience, if that continuum was not common to us all and if its peculiarities were not definite.. ...The value-scale, therefore, is integral to the nature of the Eternal Object. Our volitional activity discovers values that are there ; it does not create them."

In regard to the psychological problem, the author's main thesis is that the normative character of our value-experiences can be explained only on the hypothesis that the value-experience arises as the mutual effect of a primary and a secondary will." "Value is experienced," says the author, "when primary and secondary will work together, disvalue when they are at cross-purposes." Errors in value-judgment are "due to value-blindness and to misunderstanding of the relation of the value-element in experience to other data." The author's treatment of the different varieties of value-experience (logical, æsthetic, moral or religious) is highly suggestive and interesting, and though the reader may not be inclined to agree with his voluntaristic interpretation of the self and of value-experience, he will find much that is instructive and original in the author's analysis.

If any comment is called for on the author's views, it is that they betray an unjustifiable bias towards voluntarism for which the author's premises provide no legitimate warrant. Even granting that the Eternal Agent reveals itself as a constructive, teleological tendency in the domain of life and mind, it is not at all clear why a constructive, integrative tendency should point to an Eternal Will rather than to an Eternal Idea or Notion in the Hegelian sense. The unity of a logical whole is obviously better suited to act the part of a *rationale* for the concrete unities of experience than an aimless will groping its way blindly without forethought and without discerning foresight. And the criticism applies with even great force to the author's voluntaristic interpretation of the self as a will to harmonious self-expression in activity constantly directed to new objects. To talk of *harmonious* self-expression as the self's fundamental interest and yet to discount the logical demand of unity as the driving force in the self's activity is neither consistent nor in keeping with the facts. It may be remarked also that in the absence of any precise definition of the relation between the Eternal Agent and the Eternal Object the author's case for a realistic metaphysic remains an unproven assumption.

S. K. MAITRA

Ourselves

[*I. Budget Meeting of the Senate.—II. Portrait of Sir Devaprasad Sarvadhikary unveiled —III. Professor S. N. Sen goes on leave.—IV. Grant of Aid to the Children's Fresh Air and Excursion Society.—V. Appointment of an Extension Lecturer.—VI. Lectures by Dr. N. K. Bose.—VII —Dr. Maria Montessori to visit India.—VIII. Imperial Council of Agricultural Research on Prof. Mukherjee's Scheme relating to Coastal Soils.—IX. President, Medical Council of India, to visit Calcutta.—X. Re-nomination of a Fellow of the University.—XI. Interim Membership of the Syndicate —XII. Islamia College, Calcutta.—XIII. Cotton College, Gauhati.—XIV. Carmichael Medical College, Belgachia.—XV. Beereswar Mitra Medal for 1940.—XVI. Nagarjuna Prize for the year 1938.—XVII. Report on the Matriculation Examination, 1939.—XVIII. Report on the M.B. Examination, 1939.—XIX. Degree Course in Metallurgy.—XX. Premchand Roychand Studentship in Scientific Subjects for 1938.*]

I. Budget Meeting of the Senate

The Budget meeting of the Senate was held on 24th June, 1939.

" The financial position of the University during the current year is highly satisfactory," said Mr. Ramaprasad Mookerjee, presenting the budget estimates for 1939-40 of the University.

The Income from the following sources totals the sum of Rs. 41,35,487 :—Publications, Government grants, Calcutta Review, Interest, Rent, P.G. Teaching Fund, etc.

The Appointments Board has been made a permanent charge on the University at the end of two years during which it functioned on a tentative basis.

The Senate has decided to open undergraduate courses in Geography at a fee of Rs. 4 per month for Pass and Rs. 5 per month for Honours classes. The classes will be held in the evening.

Provision has been made in the new Budget for strengthening the Applied Section of the Psychology Department where Teachers of the Training Department will undergo training, which will bring them into intimate touch with the actualities of life. Money has also been set apart for reorganising the Physiology and Bio-Chemistry Departments.

* * *

II. Portrait of Sir Devaprasad Sarvadhikary Unveiled

The portrait of the late Sir Devaprasad Sarvadhikary, presented to the University by his daughter Mrs. Niharbala Mitra, was unveiled

by the Vice-Chancellor, the Hon'ble Khan Bahadur Aziz-ul Huque, on the 24th June last. There was a distinguished gathering at the Senate House to witness the ceremony.

In unveiling the portrait the Vice-Chancellor made reference to Sir Devaprasad's personal achievements and the renown of the family of which he was a distinguished member. He was a veteran educationist whose fame extended to the whole province. He was made Vice-Chancellor of the University in recognition of his services in the field of higher education. His career with its eminent success, the Vice-Chancellor said, would not fail to inspire his countrymen.

* * *

III. Professor S. N. Sen goes on leave

Professor S. N. Sen, M.A., PH.D., B.LITT. (Oxon.), has been granted leave without pay for six months with effect from the 12th June, 1939. He was one of the Local Secretaries to the Indian History Congress to be held in Calcutta, next winter. He has resigned this office in view of the fact that he will be away from Calcutta at that time. His place has been filled up by the appointment of Mr. Susobhanchandra Sarkar, M.A. (Oxon.) and Mr. Jogeschandra Chakravorti, M.A. as Joint Local Secretaries.

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IV. Grant of Aid to the Children's Fresh Air and Excursion Society

The Children's Fresh Air and Excursion Society which arranges excursions under competent teachers to take poor school-going children out of Calcutta twice a year—once during the Pujah holidays and again during the Summer, has received the sum of Rs. 100 from the University on condition that the money be spent for the benefit of boys reading in schools recognised by the University.

* * *

V. Appointment of an Extension Lecturer

Mr. A. K. Saha, Engineer Physicist (U.S.S.R.), who has been responsible for numerous inventions in chemical engineering in Russia,

has been appointed an Extension Lecturer to deliver a course of Lectures on " Fuels and Furnaces."

* * *

VI. Lectures by Dr. N. K. Bose

Dr. N. K. Bose, Assistant Director of Irrigation, Research Department of the Punjab, who has been invited by the Bengal Government to assist them in the planning of a Hydrodynamical Research Laboratory for Bengal, will deliver a series of lectures under the auspices of the University. The subject of these lectures will be announced later.

* * *

VII. Dr. Maria Montessori to visit India

The University has been informed that Dr. Maria Montessori will visit India in October this year and will deliver lectures before Universities and other learned bodies during her proposed stay of six months in this country. Our University has decided to arrange for the delivery of a course of lectures by her on the new methods of teaching associated with her name.

* * *

VIII. Imperial Council of Agricultural Research on Prof. Mukherjee's Scheme relating to Coastal Soils

The Imperial Council of Agriculture has sanctioned the scheme of Professor J. N. Mukherjee for work on problems connected with Coastal Soils, laying down certain terms and conditions according to which the work may be conducted. The University has conveyed to Government its approval of these terms and conditions as well as of the appointments made in this connexion.

* * *

IX. President, Medical Council of India, to visit Calcutta

The President, Medical Council of India, will visit Calcutta towards the end of July, 1939, in response to an invitation of the

University and inspect the Medical Colleges affiliated to it with a view to placing certain new facilities at their disposal.

* * * *

X. Re-nomination of a Fellow of the University

Professor M. Z. Siddiqi, M.A., PH.D. (Cantab.), has been re-nominated an Ordinary Fellow of the University with effect from the 26th May, 1939, when his present term of office expired. He has been attached to the Faculty of Arts and his membership of the different Boards of Studies and Committees has been renewed.

* * *

XI. Interim Membership of the Syndicate

The Dean of the Faculty of Medicine has nominated Mr. M. N. Bose, M.B., C.M. (Edin.), F.S.M.F. (Bengal), to act as a Member of the Syndicate during the temporary vacancy caused by the absence of Dr. B. C. Roy from town.

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XII. Islamia College, Calcutta

The Islamia College, Calcutta, has been granted affiliation in Geography up to the I.A. and I.Sc. standard with effect from the session 1939-40 in addition to the subjects it is already teaching.

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XIII. Cotton College, Gauhati

The Cotton College, Gauhati, has been granted affiliation in Assamese as Second Language for women students to the I.A. standard extending its present teaching arrangements, with effect from the session 1939-40.

* * *

XIV. Carmichael Medical College, Belgachia

The Carmichael Medical College, Belgachia, has been affiliated to the Calcutta University in English, Bengali, Chemistry, Physics,

Mathematics, Botany, Zoology and Biology to the I.Sc. standard with effect from the ensuing session.

* * *

XV. Beereswar Mitra Medal for 1940

The following subject has been selected for the Beereswar Mitra Medal for the year 1940:—

"Gold Exports from India since 1931."

* * *

XVI. Nagarjuna Prize for the year 1938

The Nagarjuna Prize and Medal for the year 1938 have been awarded to Mr. Phanindrachandra Datta, M.Sc., on his thesis on "Studies on the Selinene Group," which he submitted along with other papers.

* * *

XVII. Report on the Matriculation Examination, 1939

The number of candidates registered for the Matriculation Examination held in March, 1939, was 44,587 (including those in special subjects), of whom 308 were absent and 17 disallowed.

The number of candidates who actually sat for the examination was 44,270 of whom 120 were expelled.

The number of candidates who passed the examination is 26,433 of whom 7,333 passed in the First Division, 13,448 in the Second, and 5,652 in the Third Division. The number of candidates who have passed in one subject is 97.

The percentage of passes is 59.95. (The percentage of passes in 1938 was 78.7).

The results of a number of candidates have been withheld pending further enquiry into their cases.

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XVIII. Report on the M.B. Examination, 1939

The number of candidates registered for the Preliminary Scientific M.B. Examination, held in April, 1939, was 212 of whom 147 passed, 60 failed, 4 were absent and 1 expelled.

The number of candidates registered for the First M.B. Examination, held in April, 1939, was 175, of whom 108 passed, 66 failed and 1 was absent.

Of the successful candidates 1 obtained Honours in Anatomy and 2 in Physiology. Roll Cal. 145 has been recommended for a Gold Medal in Physiology.

The number of candidates registered for the Second M.B. Examination, held in April, 1939, was 139 of whom 84 passed, 51 failed, and 2 were absent. Of the successful candidates 4 obtained Honours in Pathology. Roll Cal. 76 has been recommended for a Gold Medal in Pathology.

The number of candidates registered for the Third M.B. Examination, held in April, 1939, was 151 of whom 101 passed, 49 failed and 1 was expelled. Of the successful candidates none obtained Honours and accordingly no recommendation was made for the award of a Gold Medal.

The number of candidates registered for the Final M.B. Examination, held in April, 1939, was 261 of whom 99 passed, 158 failed and 4 were absent. Of the successful candidates 1 obtained Honours in Surgery and was recommended for a Gold Medal on the subject (Cal. 152).

* * *

XIX. Degree Course in Metallurgy

The Government has sanctioned the introduction of a Degree course in Metallurgy under the University. The examination will be held annually. The course for the Degree of Bachelor of Metallurgy shall be for three years and the examination shall be divided into three Sections—Section A, Section B and the Final Examination. Any undergraduate of the University may be admitted to this examination provided he has prosecuted a regular course of study in a college affiliated to the University to the B.Met. standard for three academical years after passing the Intermediate Examination in Science with Chemistry, Physics and Mathematics or for two academical years after passing the Bachelor of Science Examination with Chemistry, Physics and Mathematics, in which case he shall be exempted from Section A Examination. Syllabus and other particulars regarding the

examination will be found in Chapter LII-A, of the University Regulations.

* * *

XX. Premchand Roychand Studentship in Scientific Subjects for 1938.

The Premchand Roychand Studentship in Scientific subjects for 1938 has been awarded to Mr. Mukundamurari-Chakrabarti, M.Sc. and Dr. Satyacharan Chatterjee, D.Sc. Mr. Chakrabarti submitted a thesis entitled "Studies in Parasitic Protozoa." Mr. Chatterjee's thesis was on "The Floristic Elements of the Flora of Bengal, Bihar and Orissa and their Origin."

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THE

CALCUTTA REVIEW

AUGUST, 1939

PRE-HISTORY AND PROTO-HISTORY OF ASIA

DR. KALIDAS NAG, M A. (CAL.), D.LITT. (PARIS)

Delegate, International Congress of Anthropology and Pre-historic Archaeology, Istanbul.

IN course of our survey of the Indo-Pacific domain we were repeatedly confronted with the problems of Early Man in Asia. A new chapter in the study of Asiatic pre-history was opened with the discovery in 1890 of the Pithecanthropus Erectus or the Java Man by Eugene Dubois. The fossil mammals that were discovered by him along with the Trinil skull were placed by Dubois as early as the Pleistocene age. But he changed his opinion with regard to the actual skull which he supposed was that of an anthropoid ape allied to the gibbon and not to a man. But his original theory has been confirmed by the eminent Dutch Palaeontologist G. H. R. von Koenigswald (*A Review of the Stratigraphy of Java and its relation to Early Man*, 1937). After a searching scientific analysis of the materials Dr. Koenigswald came to the significant conclusion that the age of the Trinil culture was Middle Pleistocene and that it was preceded by an earlier culture represented by *Homo Modjo-kertensis* whose fossil bones have been discovered near Modjokerto, west of Surabaya. He further adds that

the fauna as well as the stone implements of Java of these epochs and of the Siwalik and the Narbada valley " will make for good correlations between the Pleistocene of Java and India."

In 1931, the late Mr. C. ter Haar of the Dutch Geological Survey discovered various remains of fossil men near Ngandong on the Solo river. This new Solo Man is reported to show the greatest affinities to the Rhodesia Man from South Africa. Thus not only the fossil bones but the stone implements also show a wide distribution of early human cultures extending from South Africa to Java ; and although the so-called Australoid Wadjak Man of Dubois has not been admitted as coming from the Pleistocene age, yet a similar Australoid population of the Neolithic period is now known to have connected Java with Australia.

In the light of these discoveries we may read profitably the paper of Prof. D. S. Davidson of the University of Pennsylvania (*The Antiquity of Man in the Pacific and the Question of Trans-Pacific Migrations*, 1937). He opines that towards the end of the Pleistocene age with its characteristic fauna the *Dingo*, the Proto-Australoid people (probably represented by the Wadjak remains) lived in Java and passed through Java into Australia where we find the lack of bow and arrow, of pottery, horticulture and domestication of animals. Thus the proto-Australians probably departed from South-Eastern Asia before the above cultural traits were developed. After these Australoids of the Early Recent period came the Negroids in the Middle Recent epoch and these people, according to Davidson, appear not to have possessed water-craft capable of extended journeys on the open sea (*Davidson*: *Journal of the Polynesian Society, No: 44*, 1935). Thus we find that the Negritos, Papuans and Melanesians (all descending from the black races) " confined their colonization to a chain of islands few of which are separated by straits more than 50 miles in width at present sea level."

After the Melanesians there appear on the Pacific horizon the Mongoloid Indonesian races who colonised Micronesia and Polynesia—far-off zones of the North Pacific " which could be reached only in Ocean-going water-craft capable of extended sea journeys." Although lengthy coastwise journeys were known to be common in earlier times, when we scrutinize the evidence from early peoples like the Egyptians and the Indians we find that "ocean navigation was not prominent until sometime during the 1st millennium B.C.," which marked the transition

from the pre-historic to the proto-historic chapter of Asiatic culture. Thanks to the hoary antiquity of the Peking Man and the Java Man which we have already described and also of the Rhodesia Man and of the Mount Carmel Man of Palestine, Western scholars are approaching Asia and Africa with a new spirit of awe and expectation. They are inclined to place the Palaeolithic and the Mesolithic cultures only in the real *pre-historic* group, relegating the Neolithic and the Chalcolithic cultures, to the *proto-historic* epoch. But while the culture of the pre-historic man in this sense is more or less correlated with geo-chronology, thanks to the panistaking and scientific analysis of geologists, palaeontologists and pre-historians, the chronology and diffusion of neolithic and chalcolithic cultures appear obscure, complicated and apparently in disjointed series of evolution. This was very candidly admitted by even an expert archaeologist like Dorothy Garrerd of Cambridge who was the Director of the Joint Expedition of the American School of Pre-historic Research and the British School of Archaeology in Jerusalem. In a brilliant paper (*The Near East as a Gateway of Pre-historic Migration*, 1937), she gives the following summary of the pre-historic cultures of Western Asia which resembled on general lines Western Europe. In the early palaeolithic age Palestine and Syria resembled the Upper Acheulian culture of Western Europe. In the Middle Palaeolithic epoch, African influence predominated spreading somewhat eastward. But with the upper or late palaeolithic stage Asiatic influence gained the upper hand and persisted into the Mesolithic period. Thus South Africa with its Rhodesia Man has come to throw a new light on the Aurignacean and Magdalenian cultures of Western Europe and the grand pictorial and artistic traditions of the latter are being examined anew in the light of the Bushmen paintings of the South and of the migration of Caspian culture through North Africa into South Europe specially in the Iberian Peninsula which is the veritable Paradise for pre-historians. They have boldly broken the taboo of " untouchability " prevailing between Black Africa and White Europe.

But if this cultural relation between Africa and Europe, in the Stone age, is still only partially admitted, the contact and collaboration between Africa and Asia are beyond any shade of doubt. If the Rhodesia Man and the Java Man with their respective cultures are at present but vaguely equated, there cannot be any doubt as to the existence of the dark races (pure or mixed) and their distri-

bution in Asia. The Negritos spread over South India, Malay Peninsula and the Philippine islands ; the Papuans were in the heart of New Guinea and the Melanesians reached the far-off New Caledonia. When or whether these Negroids mixed with some other races to form the Australoids and discovered the biggest island in the world is not definitely known. But the proto-Australoids (including the Veddas of Ceylon and possibly a few other South Indian races) and the Negroids follow strikingly parallel lines in their cultural expansion from the Indian Ocean right up to Melanesia and Australasia. Already Heine-Geldern (*Anthropos*, 1932) suggested a chronological limit of about 1500 B.C. when the Negroids (who followed the Negritos) came to be dominated over by the Mongoloid Indonesian peoples who, as we have observed, were the first to colonize Micronesia and Polynesia, thanks to their progress in ocean-going water-craft. We have noticed also that during the 1st millennium B.C., Ocean-navigation came to be prominent for the first time as observed by Davidson. While the early Vedic texts offer little conclusive evidence with regard to the familiarity of the Indians with the Ocean and Ocean-navigation, these come to be more and more conspicuous in later Vedic and Epic literatures. The Indonesian world and Java are clearly mentioned in the *Ramayana*. From the geographical data in Indian books like the *Arthasastra* and from *Periplus of the Erythrean Sea* and *Ptolemy's Geography* we can definitely conclude that the centuries immediately before and after Christ were marked by a phenomenal development in Ocean-navigation. Navigators from India together with the Indian merchants (Vaisyas), Kshatriyas and Brahmins were real pioneers in the Western Pacific founding big and prosperous kingdoms in Indo-China (Champa and Kamboje) and Insulindia (Sumatra, Java, Borneo and Celebes). It was in this Indonesian field of Greater Indian civilization that the ancestors of the Micronesians and Polynesians probably derived their earliest culture and their inspiration and technique of Ocean-navigation which enabled them to explore the Pacific from the Hawaii Islands in the North to New Zealand in the South and to the Easter Islands facing South America in the farthest East.* This expansion, however, was in the historic epoch extending over

* The advent of the Aryan-looking Caucasoid Polynesians synchronised very significantly with the eastward expansions of the Melanesians right up to Fiji and also with the northward movement of the Malayas who are now admitted to be a mixture of the primitive South-Asiatic races with the Mongoloid and thus may be a branch of the Mongoloid Indonesians preceding them.

about one thousand years from the earliest Indian inscriptions in Indonesia (*circa* 4th century A.D.) to the landing of the Maories in New Zealand (*circa* 14th century A.D.).

But Australasia in the Proto-historic and Pre-historic periods negotiated very closely with far-off North China—the cradle of the Peking Man who is considered by several pre-historians, as a distant cousin of the Java Man. The most sensational discovery in the domain of the recent pre-historic studies is the progressive correlation of the Pleistocene fauna of North China and of Java. This has been clearly demonstrated by the eminent French pre-historian Père P. Teilhard de Chardin (*The Pleistocene of China: Stratigraphy and Correlations*, 1937). He showed that the faunal analogies between the Equus-bearing lake-deposits of North China and the Equus beds of India (in upper Siwaliks: Tatrot and Pinjor) and of Western Europe are quite clear and convincing. He also showed that the Middle Pleistocene of North China corresponds to similar beds of Java " which are almost actually linked with the Sinanthropus beds by a chain of Stegodon-bearing fissures from Java to the Yang-Tze river basin through Indo-China." It is also significant that these synchronised beds of China, Java, India and Western Europe contained " the first sure traces of man !" (*vide De Terra: Cenozoic Cycles in Asia and their Bearing on Human Pre-history, Proc. Ame. Phil. Soc., Vol. 77, No. 3, 1937*). The cultural commerce between Java in South Asia and the Siwalik and Choukoutien beds in North Asia was mainly carried on by the land route through Malay Peninsula and Indo-China where many Pre-historic relics have already been discovered and more will be forthcoming.

We are not sure, however, whether the cultural movement in this remote stone age of Asia was from the South to the North or *vice versa*. But there is no doubt whatsoever as to the dominant rôle of the Mongoloid races in the peopling of America. Exactly at what particular stage of the Stone age culture this migration to the New World took place, there is no chance of knowing definitely. Only one thing is sure that all attempts to prove the existence of a non-Asiatic New World Man (*Homo Novus Mundus*) have been frustrated, as shown by Dr. Ales Hrdlicka of the United States National Museum, in his paper " *Early Man in America: What have the Bones to Say*, 1937." The Vero finds on the Atlantic coast in central eastern Florida, the Folsom deposits in New Mexico and Colorado no doubt mark

a new departure in the study of American origins. They have added new chapters on Folsom-yma cultures which grew with the appearance of the first Mongoloid ancestor of the American Indians towards the end of the Pleistocene or Holocene epoch. H. J. Spinden, in his suggestive paper "*First Peopling of America as a Chronological Problem*," 1937, observes that from the point of view of chronology, the Mongoloid migration into America may be as late as the Neolithic age for the artefacts and implements of Early Man in America bear the mark of "relatively advanced neolithic arts with the flint knife and the stone axe as accepted symbols." He is also of the opinion that the culture was transferred to America *via* the Siberia-Alaskan bridge. According to Spinden, the ancestral cultures of the American Indian could be traced into neolithic cemeteries near lake Baikal where polished celts, chisels, knives, etc., are found along with harpoon points, fish-hooks, bone-saws and daggers, basket-marked pottery and copper objects—many of which could be compared with the cultural finds of America where Folsom and yma blades show a skill in chipping unequalled during the Mesolithic period.

As regards the route of migration, Spinden points to the way of the Amur river and the coast and also to the water-road from lake Baikal, along the river Lena to the East Cape. East Cape in Asia is only 56 miles from the Cape Mountain of America and in between there are three rocky islands in the Behring Strait so that there is every possibility of crossing, the longest stretch of open water being only 25 miles. This was pointed out by P. S. Smith, Chief Alaskan Geologist, who observed that Alaska in those early days might have been an attractive land and that "the fossil remains of its then existing flora and fauna show that it could well have supplied the wants of many migrant people passing through or dwelling within it" Thus in tracing the earliest cultural relations of America with the outside world we are driven to the study of the early man and fauna of Eastern Asia. In course of the last ten years of intensive exploration and study following the discovery of the Peking Man, North-Eastern Asia has suddenly assumed a position of unique importance ; for here we not only meet probably the earliest ancestor of man but also a clear sequence of cultures—Palæolithic, Mesolithic, Neolithic and Chalcolithic—such as is rarely to be found in any other country of Asia. The discovery of the *Yang-Shao* civilization of the third millennium B.C., its possible connections with the culture of Anau (Turkistan) of Tripolji

(South Russia) and of the Baltic passage are forcing us to revise many of our theories with regard to the cultural migrations from Asia to Europe, specially towards the end of the Neolithic age when Chalcolithic civilization like that of Mahenjo-daro and Harappa, Susa and Kish opened new chapters in the proto-history of Asia.

The Indus valley people of the 3rd millenium B.C. are now known to be in close cultural relations with Mesopotamia and even with far off Egypt as recently shown by Earnest Mackay. In his latest excavation reports he draws our attention to the oblique-eyed Mongolian figurines which go to strengthen the finding of Dr. B. S. Guha who identified the solitary Mongoloid skull discovered so far in the Indus-valley. So in the Chalcolithic age, possibly as early as the 4th millennium B.C., India was negotiating with the Mongolian world where the Neolithic antiquity may reach as high as 10,000 B.C. Beyond that stretches the, as-yet-indefinite from the point of view of time but culturally clear-cut, sequences of the Palaeolithic age and culture. To the partial elucidation of the problems of those remote ages three pre-historians—H. de Terra, P. Teilhard and T. T. Paterson —collaborated on the Siwalik finds announcing the summary of their results in 1936 through the scientific periodicals *Nature* and *Science*. The earliest Stone-age culture of India is represented by the hand-axe technique of Madras and the old Stone-age peoples may have migrated from South India into Central India where in the Narbada valley have been found Middle Pleistocene tools and fauna which gradually extended through the Ganges and Jamuna valleys to North-Western India right up to the Himalayan hills. These valuable conclusions which gave a new significance to the early history of India were the results of the scientific explorations under Dr. Hellmut de Terra in the Siwalik hills under the auspices of Yale University, the Carnegie Institute of Washington and the American Philosophical Society. The first valuable paper, "*The Siwaliks of India and Early Man*," was communicated by Dr. de Terra to the *Symposium* (March, 1937) on *Early Man* published in commemoration of the 125th anniversary of the foundation of the Academy of Natural Sciences of Philadelphia Most of the papers that I have quoted in this article are chapters of this remarkable volume edited by Dr. George Grant MacCurdy, Director of the American School of Prehistoric Research. Two years later, the sixth Pacific Science Congress at Berkeley, California, is going to arrange another Symposium in August on "Early Man in Asia and the Pacific

Regions." Our esteemed friend and colleague Dr. B. S. Guha of the Indian Museum has been invited to contribute to the discussions at Berkeley as well as to the forthcoming International Congress of Anthropology and Prehistoric Archæology to be held at Istanbul in September. Through such scientific conferences the attention of the expert pre-historians of the Western universities will naturally be drawn towards the pre-historic culture of India and of Asia. But it is high time that our own universities and learned societies, official as well as non-official, should wake up to the needs of exploring systematically the undeservedly neglected pre-historic and proto-historic culture zones of India. This has been strongly advocated by Sir Leonard Woolley in his latest report on the Archæological Department of India; and endorsing fully his opinion with regard to that chapter of our history, I conclude this article by appealing to my countrymen to build up the first *Musee de l'Homme* (Museum of Man) and the first *Institute of Prehistoric Research* in India. The Geological, the Zoological and the Archæological Surveys of India, collaborating with our various universities and learned societies, may easily develop such a Museum and an Institute attracting the necessary funds and scientific collaboration from India and abroad.

INDUSTRIAL PLANNING AND ECONOMIC AUTARCHY

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CONSIDERABLE confusion prevails in India in regard to the use of the three following terms: (1) Industrial Revolution, (2) Industrial Planning and (3) Industrialization.

Industrial Revolution has not been achieved in India as yet. The existence of several big industries in India does not prove that we have consummated our Industrial Revolution, just as single swallows do not make a summer. A necessity of the hour is an estimate of India's present position in comparison with that of other industrial countries. It should be possible to establish some equations of comparative economics on the basis of chronological distances. One is likely to be convinced that—

India	is	some	90—100	years	behind	Britain,
,,	,,	,,	70— 80	,,	,,	Germany,
,,	,,	,,	50— 60	,,	,,	France,
,,	,,	,,	40— 50	,,	,,	Japan and Italy.

This may be proved by the indices of technocracy, railway business, insurance, premium, bank-capital and industrial output, etc., per head of population and per square mile of territory.[1]

PLANNING: SOVIETIC AND NON-SOVIETIC

Dealing with the second category we should say that there are two types of "planning," the Sovietic and the non-Sovietic. Technocratically speaking, both these types are alike. They have a specific objective to be attained within a specific time-limit. Besides, each involves an earmarked budget of quite a few crores of rupees to be commandeered as almost a military necessity. Ideologically, however, there are fundamental differences, as the Soviet system allows no profiteering and indeed no profits at all. The non-Soviet

[1] See B. K. Sarkar: *Economic Development*, Vol. II (Calcutta, 1932, 1938).

or capitalistic type is best illustrated by Germany, Italy and Japan and to a certain extent also by America, Britain and France. But whether capitalistic or non-capitalistic, industrial planning presupposes a dictatorial and centralized drive for the fulfilment of the plan from the side of the state. It is essentially etatistic.

One is entitled to ask: Where is the dictator in India today to serve and to command all the four hundred millions and commandeer all their resources that we talk glibly of "planning"? No Indian revolution has yet produced a Lenin or a Mussolini or a Hitler. And, of course, in India there is no Roosevelt or even Chamberlain, and indeed neither the *Front Populaire* of France nor the *Sei-yu-kai* party of Japan. Where, besides, are the crores of rupees to come from in order that they may be commandeered or earmarked with the object of operating the totalitarian plan? This also is a relevant query.

Economico-technocratically as well as socio-politically India is too far behind the modern world to employ the language of the latest economic strategy and tactics used by the industrial "adults" of mankind. India is still in some of the earlier stages of the first industrial revolution whereas the leading countries of Eur-America are consummating their second industrial revolution. Indian economic statesmanship should have to be satisfied as a rule with the categories prevalent among the pioneering and go-ahead sections of the Eur-Americans, say, some 60 to 75 years ago, when the very alphabet of "planning" was unknown and when indeed they had no dictators, capitalistic or non-capitalistic. But, of course, should some of the Indian intellectuals want to indulge in the luxury of displaying their acquaintance with the up-to-date words and phrases of present-day Eur-America, hyper-industrialized as some of its countries happen to be, they are at liberty to write learned monographs on the far-off divine event towards which India may somehow some day be made to move. Such monographs may be appreciated as contributions to Indian economic speculation.

Industrialization: A Comprehensive Category

So there remains the third item, Industrialization. This is a simple category implying nothing more than the establishment of new industries or the extension of the existing ones. It implies, besides, as a matter of course, the promotion of banking, insurance, foreign and

internal trade, shipping and other transport systems as well as the improvement of agriculture. Further, it is comprehensive enough to include cottage, small and medium industries, *i.e.*, business organization on all scales. Every new factory or trading establishment or agricultural enterprise—be it with a capital of 500, 5,000, 50,000, 500,000 or 5,000,000—is a solid and effective contribution to the industrialization of India. There is no metaphysics in industrialism, and it excludes no economic activity. The primitive and elementary efforts of which the Indians are in the main capable at the present stage do not require such bombastic words as "industrial revolution" and "industrial planning." The proper category is industrialization or economic development. *A Scheme of Economic Development for Young India*, furnished with minute details, was published by the present author in English and Bengali in the summer of 1925 and subsequently several times in various forms, and propagated through the dailies, weeklies and monthlies.

Bengali Autarchy

So far as Bengal is concerned, it should be treated as an independent economic unit just as the Bengali people is known as an independent cultural unit. It is on a provincial basis that Indian economic planning—whatever it may mean—should be investigated and worked out. This does not imply that Bengal should separate herself from the All-India system. The place of the Bengali people in the Indian complex should be envisaged as similar to that of the French, Italians, Germans, etc., in European polity. We have to profit by the international agreements regarding rivers, railways, postal and other services, etc., by which the states of Europe co-operate with one another. But still France is France and Italy Italy. The European states maintain their economic self-sufficiency and each organizes its own planning on independent foundations inspite of the Anglo-French Entente, the Little Entente, the Franco-Russian-United Front, the Berlin-Rome Axis, and Pan-Europa or Pan-America ideologies. Bengal should try as far as possible to be economically autarchic according to the ideals of her glorious *Swadeshi* revolution of 1905. But she should make it a point also to join the All-India system of industry, finance, marketing, labour and defence. Bombay, Madras, the Punjab, Assam, indeed each one of the provinces ought to do the same, *i.e.*, try to make herself autarchic in the first instance, and then look for All-Indian co-ordination, centraliza-

tion or federalization according to requirements. It ought to be emphasized that in order to avoid duplication and wastes as well as to promote rationalization All-India Boards will have to be instituted in all spheres and function permanently.

Unconscious Autarchy

From the pre-historic times for thousands of years down to the discovery of America, nay, to the end of the eighteenth century, exports and imports between different countries of the world and even of the same continent were very little in quantity and variety and confined mostly to what might be described as the luxuries of life. Both in East and West every country, sometimes every village and every town, was economically self-sufficient. Autarchy was an actual fact of the economic conditions prevailing among the diverse tribes, races, or nations. The old-world, millennium-long autarchy may be described as unconscious autarchy.

Mercantilist, Protectionist and Swadeshi Autarchies

International trade, as we understand it today, is barely a fact of not more than a century or a century and a half. Exports and imports between countries or between continents and between the two Hemispheres have grown immensely since the opening of the Suez Canal in 1869. The commercial tendency of mankind has been moving towards the establishment of a world-economy, *i.e.*, interdependence of regions, states or peoples in the requirements of daily life. But during this same period the theory and policy of autarchy has been no less prominent than the fact of unconscious autarchy during the primitive, ancient and medieval epochs. Autarchic ideology has been embodied, first, in the mercantilist concept of promoting exports with the object of importing gold, and secondly, in the protectionist tariff activities of Napoleon, Hamilton, List and others in Eur-America down to the *Swedeshi* movement of Bengal and other parts of India since 1905.

The autarchistic ideas associated with the *swadeshi* or national industry complex have been the most prominent features of the tariff policy of every country, old and new, since the end of the Great War. Autarchy has been the ideology as much of the Gosplans in Soviet Russia as of the non-Sovietic plans in other countries comprising the

protective and preferential customs duties of the British Empire-economy and the French Colonial Empire.

The New Autarchy

The third phase of autarchy, which may really be described as a continuation of the second, is to be seen in the Italian economy since the Abyssinian War. Under the pressure of the "sanctions" or boycott exercised by the League of Nations Italy has been compelled to develop her economic possibilities to the farthest limit. Another instance of the latest form of autarchistic ideology and policy is furnished by Germany. Because of the high protective tariffs of the industrial nations, large, medium and small, which restrict the importation of German manufactured goods Germany has been forced on account especially of currency and exchange considerations to restrict the purchase of importation of foreign goods to the extent of her exports abroad. For instance, Germany can afford to buy more cotton from India in case India cares to buy more manufactured goods and machinery from Germany.

The new autarchy, as observed in Germany, does not base itself specifically on protectionism and high tariffs. Nor, of course, does it seek the splendid isolation such as was preached by the German philosopher Fichte in his *Der Geschlossene Handelsstaat* ("Closed Commercial State") in 1800. It attempts, on the other hand, to foster foreign trade by all means, bilateral agreements, barter systems, different kinds of currency, and what not.

Autarchy an Impossibility

Autarchy as an ideal or as a fact is then almost eternal, no matter in what form. But inspite of mercantilism, protective tariffs, boycott movements, preferential treatment and restrictions on imports, every country has imported more and more from foreign countries. The volume and value of exports and imports have been growing tremendously from decade to decade during the last four or five generations. Commercial internationalism and world-economy have not been killed by the *swadeshi* movements of the nations. In other words, autarchy as a socio-economic fact has been becoming more and more of an impossibility under modern conditions.

The economic reason for this situation is not far to seek. The values created by the trade between nations are quite substantial and are enjoyed by both the partners to the commercial transaction, although not always to the same extent. The mutuality of the benefits rendered and the furtherance of the development of undeveloped areas are two of the greatest consequences of international trade. They are well calculated in the future also to keep it going and to lead mankind further and further towards the solider ties of world-economy. But "Buy *Swadeshi*," "Buy Indian," "Buy Bengali" ought by all means to be encouraged as a slogan, as an economic war-cry. The economic statesmen of India must know, however, how to adapt this autarchic idealism and nationalistic inspiration to the pressing demands of understanding between nations and agreements between regions in regard to finance, labour and goods.

EDUCATIONAL VALUE OF ATTEMPTS OF CLASSIFICATION AND MEASUREMENTS OF 'TEMPERAMENT'

SAMARENDRA NATH DAS, B.A., T.D. (Cantab.)

NOW-a-days intelligence and allied tests are widely used for the purpose of grading and classifying pupils. In fact the researches of Binet, Spearman and other psychologists in the field of intelligence and ability have provided the school-teachers with practical equipment. But the success in school depends not only on intelligence but on many other factors, and of these temperament is of vital importance. Recently increasing attention has been paid to temperament and psychologists have directed their researches to devoting effective methods of measurement and classification.

The term temperament is a very loose one and different psychologists have given different definitions. Perhaps the most clear-cut scheme is McDougall's. He distinguishes (1) disposition, which is the sum-total of an individual's instinctive tendencies or propensities; (2) temper, which is the persistency and urgency, or the degree of stability of such tendencies; and (3) temperament, which denotes the influence of endocrine and metabolic processes on the nervous system. For practical class-room purposes, the definition should include these (1), (2) and (3). But we should remember that temperament cannot be studied separately but must be considered in relation to the much wider conception of personality, which takes into account the effects of environment and training.

In considering measures of temperament we must decide which tests the teacher can himself use, and which require the help of trained psychologists. Certain tests such as those based on expression, as judged by handwriting variations, and those based on simple motor performances, such as speed in handwriting, and speed in cancellation, demand the expert. Certain tests like the "miniature situation" and "real life situation" require laboratory condition in additionto the expert psychologist. Now several education authorities in England employ a psychologist, and maintain child-guidance clinics, in which laboratory conditions are possible.

One of the well-known tests is the Downey Will Temperament Test, based on the study of handwriting performance. Speed, ease or reaction, aggressive qualities and persistence are investigated as revealed in the subject's ability to vary his handwriting according to given directions, his ability to carry on inspite of interference and care taken in imitating a given specimen of handwriting. Another well-known test is the Pressey Cross-Out Test, to measure the subject's readiness to experience emotions by means of word-association. In these tests expert advice is essential. The mechanism of the perseveration test is fairly straightforward, since the result can be expressed mathemati cally, but we cannot rely solely on it, as much depends on the mental attitude of the child which is not measurable. Yet this test can give useful indication whether a child is prone to mental inertia.

Another method of temperament measurement is based on physical appearance. Fat people tend to be placid and easy-going ; thin people are usually active and worrying.

The same also applies to class rooms. Careful observation and questioning can also help the teacher in the investigation of temperament. In this respect the play-ground and playing field should not be neglected, for they provide a more natural situation than the class room.

The present measures of temperament, though to a certain extent imperfect, and in the experimental stage, possess a reasonable degree of utility.

The educational value of the various classifications of temperament in present use is to be considered next.

The ' humours ' classification of Galen, inspite of its fallacious physiological basis, is still widely used. Godfrey Thomson attributes a great deal of practical utility to this classification in school, and gives useful advice as to how children should be treated according to their predominating humour. The sanguine or fickle or mercural child should be engaged along with steadier comrades on some interesting task lasting for some time ; the choleric child should be allowed plenty of freedom, but subjects other than those in which they are naturally interested should be added in such a way as to appear indispensable to the end in view ; the melancholic should be encouraged to take part in games and physical exercises. Moreover the teacher should give such pupils opportunities to express themselves in some ways as suited to their temperament, such as in the writing

of a play, or the performance of some artistic work. Lastly, the phlegmatic child, who is generally taken as a dullard, should never be allowed to indulge in idleness, or be driven to do routine work which fails to arouse any interest. Even at the present days of reform, the defect in educational system is that the pupil is made to fit in some pre-conceived curriculum without consideration of whether or not it caters for his interest or fits with his particular temperament. Inspite of great practical importance of 'Humours' classification and T. Thomson's application of it to school we can never classify children into exact four types. The most we can say is that such and such a child resembles this particular type.

The Perseveration Test divides children into high, medium and low perseverators. But since this test measures the degree of inertia in mental and nerve processes, this is only one aspect of temperament. So any classification based on it is likely to be incomplete.

Jung's classification is more important. He divides children into introverts and extroverts. We come across such types in our every-day life. The extrovert child is talkative, sociable, self-confident, eager for praise and agressive when thwarted ; the introvert child, on the other hand, is more reserved, waits until his achievements are recognised, and is usually more prone to thought than to action. This classification is, however, inadequate, because both types exist within the type. Generally the introvert types are neglected in the school, for they do not generally draw the attention of teachers and others and have been misunderstood in many cases.

In my opinion, the classification of temperament has a definite place in educational theory and practice. Without some systems or division into types, educational methods tend to be futile. There are, of course, a few born teachers who can easily understand children and are sensitive to their temperamental differences but for the vast majority of teachers who do not possess this gift of insight or possess it only in a small degree, the classification will be of great use, as suggesting possible differences in temperament and lines of treatment. The classification also gives us a better understanding of the child's individuality, which is so much stressed in the modern conception of educational end.

The much debated question whether the aim of education should be individual or social, is solved to a great extent when we have

fuller knowledge of the rôle played by temperament, which will help to break down this apparent antithesis.

The question of the utility of the classification and testing of temperament is bound up with the problem as to whether or not it is possible to modify the innate quality of temperament by external factors. Psychologists differ on this point. Though I think it is not possible to alter seriously the predisposing factors of temperament, still I believe that by judicious control of these factors, temperament is capable of modification to a certain extent. For example, an introvert will always be so throughout his life, but whether or not he will develop into the best or worst type of introvert, depends on the external factors in the environment, which can be controlled especially in the school. Thus a knowledge of temperament is of great importance to the teacher.

A knowledge of temperament supplies us with a better understanding of the backward and delinquent children, who are often neglected or harshly depressed ; both these processes lead to serious results. Such a knowledge would inspire confidence, and would be able to aid such children to adjust themselves to society.

Lastly the knowledge of temperament is also essential for useful vocational guidance. This will greatly help in avoiding social misfits so common in every-day life.

THE ART OF SPECULATION

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AS it is popularly understood speculation means engaging in any enterprise with an element of chance in it with the object of making some gain. In a way, throughout the course of their lives, men in every station of life have to speculate in some form or another. The cultivator who sows seed in the fields or the man who spends a considerable sum of money and time to qualify for a particular profession can be said to be engaging in speculation. The object of my discourse today, however, is not to deal with this broad aspect of speculation. I shall confine my remarks, in dealing with the subject of speculation, to a much narrower field, that is, speculation in commodities and stocks.

The popular belief that the word 'speculation' is synonymous with gambling in my opinion is entirely erroneous. The two things speculation and gambling are as wide apart as the North Pole and the South Pole. The difference between the two was very aptly described by a President of a well-known Exchange who, speaking on the subject, said: "Speculation begins where foresight enters and gambling begins where foresight leaves."

Speculation is nothing but an attempt at intelligent anticipation. It represents an endeavour on the part of a speculator to visualize today what others will be doing tomorrow.

There is no doubt about the fact that the element of chance is always present in both speculation and gambling. The difference is only about the extent of that element. To use a homely analogy, there is as much difference between gambling and speculation as there is between pure alcohol and a beverage containing a certain percentage of alcohol or between playing a still hand at poker and a game of bridge. A skilful speculator aims at minimising, as far as possible, the element of chance. A speculator takes into account all possible factors which are present or which can be reasonably foreseen. But

* Lecture at the Rotary Club, Calcutta, on July 11, 1939.

as new and unpresented factors continue to arise, and as many factors are indeterminable, inspite of the best possible efforts, skill and expense, the element of chance cannot be entirely eliminated. If this could be done speculation would cease to be speculation and become an exact science.

What I have said above should not be taken to mean that every speculator who is well equipped with all available information and a study of the relative statistics and figures can always make money. An uncontrollable factor called luck plays an important part in speculation as in all other spheres of our life. It is not unusual to come across people who are completely innocent of any knowledge of market condition making money and the operations of seasoned speculators going wrong.

A well-known speculator once had made a large bear sale of silver in the Shanghai market. The market had come down and with the object of securing his profit he sent a cable to his agent asking him to buy so many bars on his account. How the mistake occurred nobody knows but the agent received a cable which when decoded read as an order to sell so many bars. When the Calcutta speculator received a cable saying that so many bars had been sold he saw that some mistake had occurred and he sent another cable asking his agent to square all his outstanding transactions. The result was that he made an extra profit of ten lakhs of rupees as a result of the mistake in his first telegram. I one day purchased two hundred shares of a certain concern. In the course of a few hours the market went up by two hundred rupees. But the next day when contracts were exchanged, the party who had sold said that he had sold only two shares. He was not dishonest and I was quite sure I had purchased two hundred. How the mistake occurred God alone knows. Admitting that many times luck plays an important part in all operations I would not advise anybody who wants to engage in speculation to buy or sell trusting merely to luck. If we closely study all successful speculators we will find that they possess certain particular qualifications to which their success can be ascribed. If we analyse all cases of failures we will be able to come to the conclusion that they were due to certain faulty methods and mistakes.

There are various kinds of speculators—the genuine trader in a commodity combining speculation with his business, the pure speculator, the speculator with big resources, a speculator with small means

and the occasional dabbler. Within the short time at my disposal it will not be possible for me to discuss the various theories of speculation and the methods suitable for different types of speculators. In the last twenty-five years that I have been connected with the speculative markets I had occasion to come into close touch with practically all important speculators both in Bombay and Calcutta. I can say in short that in my opinion the best speculator is he who makes a close study of the market, keeps every information that can be secured and is able to change his position as conditions alter. It should not be supposed that every professional speculator or every man who is able to study closely all available information is able to make money all the time. Speculators have their ups and downs and large fortunes are at times lost by them in a single deal.

Unfortunately, however, the amateur speculators, with rare exceptions, invariably lose. It is only during a period of a strong boom that amateurs make money. That is because during an excited and booming market, no exercise of judgment is necessary. People blindly follow the tide. But when the tide begins to ebb and shrewd speculators begin to unload their purchases, those who made money on the rise find that they have been left with high-priced purchases, and they lose more than they had made.

Just as you cannot become a cook by simply reading a good book on cookery or a good bridge player by committing to heart a standard book on the subject, no amount of instruction can make a good speculator. As in all other games there are naturally players and bad players, so is the case in speculation. Good speculators have an uncanny sense of the market which cannot be defined or acquired. But there are certain principles which, if followed properly by those who are desirous of having an occasional flutter, whilst not ensuring success, will at least enable them to minimise their losses.

The first principle that every speculator should try to imbibe is the ability to cut his loss quickly. The speculator who cannot cut his loss is bound to go down sooner or later. I have seen speculators with tremendous resources losing their last penny simply because they would not get out of their commitments. But those who have the ability to change their position quickly in accordance with varying conditions are still going strong. In speculation it is always advisable to follow the good old adage—"A man who fights and runs away lives to fight another day."

The average speculator is happy if he makes a little profit on a deal. He is quick to secure his profit. He feels that he has made so much money for nothing and the profit is quickly squandered. But if the market goes against him he simply sits quiet and sticks to his deal with grim determination with the result that when the market is in his favour he makes a small profit but when it is against him he loses heavily. There is a Marwari saying: "Crush your enemy and your loss quickly." Do not give them time to become strong enough to overpower you. But by instinct the average speculator is inclined to stick to a bad bargain like a monkey sticking to its dead offspring. The average speculator seems to believe that if he once closes his deal he may never be able to get in again. The shrewd speculator follows a different policy. As soon as he finds that the market has not acted in the way he hoped or that circumstances have changed, no matter what his views are he is quick to get out because he knows that he can get in again whenever he wants to do so. He does not sit with folded hands hoping Micawber-like for something to turn up. In a great majority of cases that something never turns up. A speculator should never weaken himself by sitting over his loss, because if he does so he will not be able to take advantage of any future favourable opportunity. What happens often is that owing to this policy of not being able to cut your losses in the beginning you are forced to quit at a time when it is advisable to buy.

The average speculator never takes full advantage when the market is in his favour. He generally lets go his holdings at a small profit and again enters at higher prices. The result is that even after the market has been in his favour to the extent of twenty rupees, if it comes down by even half of it, he is a heavy loser. During the 1937 Indian Iron shares boom many speculators started buying from very low prices. The market went up as high as Rs. 80. But when the market came down with a crash to Rs. 40, practically all the speculators who had been operating from as low a level as Rs. 10 stood to lose heavily.

A speculator should try to take full advantage of the market when it is going in his favour. He should never be in a hurry to secure small profits. The clever speculator increases his commitments as the market moves in his favour and quits only when he thinks that the conditions have changed. But as soon as the market begins to take an adverse turn he starts lightening his burden. The result is

that if he is fortunate enough to get out at the right time he makes a large profit. But if the market starts going back he does not lose money. But the average speculator does not do so. Some of them do increase their commitments but they have not the ability to get out when things are going against them, with the result that they get beyond their depth. A good speculator loses only five rupees if the market goes against him to the extent of twenty rupees, because he continues to get out and get in. But if he is fortunate to get the market even five rupees in his favour he not only makes up his losses but is on the right side.

Another important thing that a speculator should remember is that in all speculative markets psychology of the operators in the market is the most important factor to be taken into account. A knowledge of the statistics of supply and demand and the various factors likely to affect the course of the market is essential. But if the market was to be determined by these things alone students of statistics would be able to wipe off all speculators in no time. What one has to consider is what will be the mental reaction of the various operators if a certain event takes place. There is no barometer by which the mentality of the operators can be judged. It is purely a question of judgment. At times the behaviour of the market gives a plain indication. No one can judge the mentality of the market people unless one is constantly in touch with the market.

People are puzzled at some scrip going down even though it pays good dividends, and at times there is a rise in the price of a share which has never paid a dividend or is not likely to pay a dividend for some time. The fact is that it is not the size of the present dividend alone which determines the price of a share. At times people are prepared to buy a share on even a two per cent. return. Their argument is that it does not matter what the yield now is, the future appears to be rosy. At times they will not buy a share even with a high yield because they believe that the future is not hopeful.

To know what the size of the jute crop is it is not necessary to go to the fields where jute is grown. From a speculator's point of view the best estimate of the crop can be formed in Calcutta because the market at least for the time being is not ruled by the actual size of the crop but by what those interested in the trade think the size of the crop is.

It is a common experience in the speculative markets that many

events which in the opinion of outsiders are likely to exercise a great bullish or bearish influence fall absolutely flat on the market. At times the effect is quite contrary to expectations. The psychology of the operators is the explanation for it.

When there was a rising tendency in the Indian Iron shares, the slightest favourable development or rumour was enough to cause a good sized rise. But when a declining tendency set in, even the most convincing arguments about the future prospects failed to have any effect whatever.

It is absolutely necessary to study the main tendency of the market and the psychology of the people. What is most important is not what the fact is but what people believe is the fact. If the people insist on calling a donkey a horse, it is no use your trying to argue with them. If you want to make money you should also be prepared to call it a horse or you should get out of the market.

In the jute market we receive Reuter's cables every day about the condition of the London jute market. Sometimes Reuters say the market is dearer. Now any student of the English language will tell you that ' dearer ' means that the price today is dearer than what it was yesterday. But the average jute speculator paraphrases this word in a different manner. One night during the Gold Standard boom I was surprised to see the market coming down quickly. When I asked the reason they said that according to Reuters the London market was dearer and the speculators' interpretation of the word dearer was that the buyers considered the market dear and would not pay these prices. From that day I also changed my ideas about the meaning of that particular word in the jute world.

My advice to all those who are interested in speculation is never to go against the psychology of the people. I attach 95% importance to psychology and only 5% to all other factors.

Another important factor in speculation is patience. One should continue to watch the market carefully and patiently and should enter only when there is a good opportunity. Many people lose money because they have not the patience to wait for a good opportunity. Just as in the game of poker a man who wants to play every hand that is dealt to him is bound to lose money unless he has an exceptionally good run of luck, in speculation too a man who cannot have patience loses money. Many speculators lose money because they enter in an uncertain market with no definite trend. They are impatient

to do some business. They cannot remain out on the market even when there is no good opportunity. The speculator should be like a crane standing on the river bank and making no movement unless a fish is in sight.

One should never enter the market if the market has gone up by 10% to 12% from the point that it started going up. If all the fluctuations are analysed it will be found that with rare exceptions the market is bound to react after a rise of 10% to 12% and lose about one-third of the rise. If one does not aspire for large profits and has the patience to wait, there is a good chance of his making money if he sells when the market has gone up to the extent mentioned or buy for a rise if the market has declined by about 12%. It will be found that if a man operates on this principle he is not likely to go wrong.

Another mistake that speculators make is to speculate in a scrip the market for which is narrow. The difference in the buying and selling price which is known as the jobber's difference *plus* the brokerage makes it impossible to get out or get in quickly. During a boom people are inclined to buy all sorts of shares. But they find to their regret that as soon as the slightest adverse factor arises it becomes almost impossible to sell unless one is prepared to do so at a big sacrifice. If one wants to speculate one should confine one's dealings to such shares as are easily dealt in and for which a free market is available. Take the jute market. In that market it is possible to sell or buy any reasonable quantity at a small difference. But on the Calcutta Stock Exchange, with the exception of one or two kinds of shares, there is a big difference in the price if you want to sell or if you want to buy. One should go in for securities which are not freely dealt in, only with a view to investment, and that too, if he has ample spare funds which he is not likely to require for other uses.

Another thing that should be remembered is that one should have the ability to bear a loss. No one can make money in speculation if one cannot afford to lose. That is because at times the market behaves in such an erratic manner that even with sure information in your hand you cannot stick to your transactions. If you cannot afford to lose you have to get out and to look helplessly on when the market begins to move as you expected. Besides one should not stake all that one can afford to lose on one deal. You should begin by staking only one-fourth of what you can conveniently afford to lose.

Now I come to the most important thing and that is the selection of a broker. Every man cannot study the science of medicine. When a man is ill he goes to a doctor in whom he has confidence. The client is like a blind man. It is the broker's duty to lead him. One has to be very careful in the selection of a broker. Unfortunately anybody with or without a knowledge of the market can start business as a broker. He acts through a sub-broker whose interest consists in having as much turnover as possible to make his brokerage.

Unfortunately there are very few brokers who take trouble to study the market or guide their clients in a proper manner. At the same time it must be said that many clients expect that every advice given by the broker should prove right. If such was the case, why should the broker do any brokerage business at all ? It is in the interest of the broker to see his client making money. If he loses, it is his luck.

If you have not the time and means to keep in touch with the market and decide for yourself, you should exercise great care in selecting your broker.

Speculation is a very fascinating game. It is like playing bridge with very high stakes. As I have said before, luck plays a great part in it. One should be prepared for good hands and bad hands. But I have found that clever players, even at card games of chance, by proper exercise of judgment and discretion, can minimise the effect of bad luck. Similarly in speculation too, if a man operates with care and uses his judgment properly, with ordinary luck he has a sporting chance of making money.

QUESTION OF PROMISCUITY IN ANCIENT INDIA

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MARRIAGE is said to have evolved out of its crudest beginning in the form of promiscuity. This represents a bestial condition of society, " in which," observes Lubbock, " marriage did not exist, or as we may perhaps for convenience call it, a communal marriage, where all the men and women in a small community were regarded as equally married to one another." [1] Men at such primitive stage had to live the life of a gregarious horde indulging in an unrestricted sex-communism among them and, it is believed, that this sort of a merely passing union of the sexes like that of lower animals cannot lead to the creation of home and family life. As this mode of living was detrimental to the preservation of the species, it could not last long and, as a matter of biological necessity, the next stage of social development was reached with its fruition in marriage and family institution. The savage's crude notion of ownership also might have impelled the primitive man to extend a kind of sex-dominion over one woman or many, with the result that family institution as a definite unit of social structure made its appearance manifest. In short the theory purports to state that marriage in the domain of human beings evolved out of an original regime of promiscuity.[2] This evolutional theory has been expounded by a great band of scholars like Bachofen,[3] Mc Lennan,[4] Herbert Spencer,[5] Morgan,[6] Lubbock [7] and others.

But, with all the forces of historical analysis, this theory has been exploded by the recent writers, Tylor, Starche, Westermarck[8] and Lowie.[9] Westermarck in his monumental work, *History of Human*

1 *Origin of Civilisation*, 3rd ed., p. 91.
2 For details, see Herbert Spencer's *Sociology*, Part III, Chs. III-VIII.
3 *Das Mutterrect*, 1861. XIX. XX. 10.
4 *Primitive Marriage*; also *Studies in Ancient History*, pp. 92-95.
5 *Sociology*, Part III, Chs. III-VIII.
6 *Ancient Society*, pp. 418-500.
7 *Origin of Civilisation*, 3rd edn., p. 91.
8 *History of Human Marriage*, 5th edn., Vol. I, Chs. II-IX, pp. 103-336.
9 *Primitive Society*, pp. 50-56.

Marriage,[1] has, in a categorical review of entire evidence, repudiated the promiscuous origin of marriage, to conclude that "the only result, to which a crucial investigation leads us, is that, in all probability, there has been no stage of human development, when marriage did not exist."[2] On the analogies drawn from the lives of higher mammals, apes and orangutan, human beings as a class are considered by him as never promiscuous in their habits. Marital and paternal relations, according to him, are the results of instincts even with regard to manlike apes,[3] and we have no reasons to maintain that the case is different with man. The author means to say that the sex-urge in man is a conscious impulse, and as such, must have impelled the primitive man to provide for the preservation of the species, as well as the well-being of the race, and, therefore, must have its natural fulfilment in a kind of institution, known as marriage. Marriage is, therefore, a natural institution existing from the very infancy of mankind. The great scientist Darwin shares the same conviction inasmuch as the sex-communism according to him is a trait of later development of human civilisation, which makes its appearance felt when "man has retrograded in his natural instinct and advanced in intellectual powers."[4] The modern scholar of great repute, Andrew Lang, draws the same conclusion in his *Secret of Totem*. Howard on the subject makes the following observations in his *History of Matrimonial Institution*:[5] "The researches of several recent writers, notably those of Starche and Westermarck, confirming in part and further developing the earlier conclusions of Darwin and Spencer, have established a probability that marriage, or pairing between one man and one woman, though the union be only transitory and the rule frequently violated, is the typical form of sexual union from the infancy of the human race."

In the valued opinion of Westermarck,[6] "it has most probably developed out of a primeval habit. We have reasons to believe that even in primitive times, it was the habit for a man and a woman (or several women) to live together, to have sexual relations with one another and to rear their offspring in common, the man being the

1 *op. cit.*
2 *loc. cit.*
3 *op. cit.*, p. 53.
4 *Descent of Man*, Vol. II, p. 362.
5 Pp. 90-91.
6 *History of Human Marriage*, Vol. I, p. 27-28.

protector and supporter of his family, and the woman being his helpmate and nurse of their children." In estimating the truth of this assertion, we should, however, not confuse the biological element with what is moral. For, marriage in its biological import exists even when, in its primitive stage of development, it is accompanied with much sexual laxity and, undoubtedly, with the possession of marital rights by others than the husband. The theorists have lost sight of the fact that looseness of morals is different from promiscuity, and it is due to this confusion that every item of sexual laxity, prenuptial unchastity, frequency of separation, group-marriage, polyandry or marriage without ceremony have been reckoned as survivor of promiscuity. But, as a matter of fact, marriage in its biological significance exists in every stage of human development.

With these foregoing observations let us now launch upon a discussion of the theory in the light of the literary evidence of ancient India. McLennan, in his *Studies in Ancient History*, has laid stress upon the so-called items of traditional evidence in support of the theory of promiscuity. To quote his words, "tradition is found everywhere pointing to a time when marriage was unknown, and, to some legislator, to whom it owed its institution: among the Egyptians to Menes, the Chinese to Fohi, the Greeks to Cecrops, the Hindus to Śvetaketu." [1] It is evident that the story of Uddālaka-Śvetaketu of the *Mahābhārata* [2] furnishes a legendary account savouring of an apparent promiscuity of ancient India. From the account, it appears that Pāṇḍu while advising Kunti to raise issues by others, concedes that *niyoga* or levirate is preferable to the transgression of moral and conjugal discipline. As a passing reference, he informs that in former times, women were not confined within the house in their dependence upon husband and other relations; on the other hand, they enjoyed themselves as best as they could by way of indulging in sexual congress outside their wedlock. Pāṇḍu further mentions that such custom has not then ceased to exist in the land of Uttarakuru. But he observes that this revolting custom was long abolished by Śvetaketu, the son of Uddālaka, who noticed the colossal immorality of the whole thing, and, regulated the sex-relation as a necessary institution of society. But though the legend

[1] P. 95.
[2] Bk. I, Ch. 122.

presumably shows that primitive Aryan society passed through a probable state of unrestricted sex-association, yet, we should receive the significance of it with an adequate caution, and should pause to think, to what extent the values are to be assessed upon the truth of this legendary statement for the purpose of studying the social life of primitive India.

It is admittedly believed that on the threshold of ancient Indian literature, Vedas constitute the oldest monument of India's culture and civilisation. In the whole range of this literature, however, we are not confronted with a single evidence of promiscuity. On the other hand, according to Adolf Kaegi,[1] "the Vedic singers know no more tender relation than that between the husband and his willing, loving wife, who is praised as his home,[2] darling abode and bliss in his house."

To recount in a few words, the marriage-life as depicted in the wedding hymns of the *Ṛgveda* [3] and the *Atharvaveda*,[4] we may observe that the position of wife was one of dignity and security in the house, where father stood for children as an embodiment of all that is kind and good. It was fully understood that the domestic felicity depends upon the unison of hearts between the married couples who were entrusted to realise the great vocations of life towards the socio-spiritual advancement of family. "The poetical ideal of the family," say Professors Macdonell and Keith, "were decidedly high,[5] and we have no reason to doubt that it was often actually fulfilled." [6] The constancy and faithfulness of the wedded couples reveal to us a portrait of high moral significance. All these facts bear an irrefutable testimony to show that marriage was regarded in the earliest Indian record "as a true companionship of the purest character, a union of pure hearts for the cultivation of the best feelings of our nature." [7]

There are no doubt in the Vedic literature incidental references to the cases of infidelity and lapses of morals.[8] These are, however, mere shadows of the picture and it is a veritable truism that no ethnologist knows an unsophisticated child of nature. We cannot but submit

1 *Ṛgveda*, Translation by Arrowsmith, p. 15.
2 *Cf. Ṛgveda*, III, 53. 4.
3 X. 85.
4 Bk. XIV.
5 *Cf. Ṛgveda*, VIII, 31. 5-9 ; X, 34, 11; X, 85, 18-19, 41; etc.
6 *Vedic Index*, Vol. I, p. 484.
7 Sir Gooroodass Banerjee's, *Hindu Law of Marriage and Stridhan*, 5th edition, pp. 31-32.
8 *Cf. Ṛgveda*, IX, 96. 22-23; IX, 32.5 ; X, 123; etc.

in this connection that allusions to evil impulse of man may be collated to a great extent from any record of human history. That does not, however, throw into insignificance the brighter phase of the portrait, if it be found delineated with colourful impression. The culture that is enshrined in the ancient Indian literature points out with certitude that, round the nuclear instinct of propagation, clustered not only the biological considerations, but also moral, and above all, the spiritual idealities. Ideals alone preserve nature and it was so early recognised in India.

It is not that the vices of faithlessness and adultery fail to bring about repugnance in the mind of the Vedic people to get them punished and purged of the taint of sin. Though Weber [1] has adduced some materials to indicate an indifference to such crimes in the Vedic age of India, Delbrück [2] has clearly set aside all his arguments as unsatisfactory. "The cited prescriptions," [3] say Macdonell and Keith, "forbidding connexion with another man's wife during a certain rite do not imply that such connexion would otherwise be allowed ; the ritual of the Varuṇapraghāsa,[4] when a wife names her lover or lovers, seems originally to have been a solemn means of banishing the evil brought on a family by a wife's fall ; Yājñavalkya's famous saying[5] that no one cares whether a wife is unchaste (*parāṅpuṃsā*) or not, is a mere mistranslation,[6] the expression *parāṅpuṃsā* really meaning "removed from the male persons." [7] According to Kaegi,[8] "the hymns strongly prove how deeply the prominent minds in the people were persuaded that the eternal ordinances of the rulers of the world were as inviolable in mental and moral matters as in the realm of nature, and that every wrong act, even the unconscious, was punished and the sin expiated."

In the circumstances, stated above, we do not understand why the theorists have made a capital of the story of Uddālaka-Śvetaketu of the *Mahābhārata* to prove the history of promiscuity in ancient India. In the first place, the historic authenticity of the tale is not free from doubt and objection. It should at the outset be borne in mind that Uddālaka and Śvetaketu are the two famous personages in the *Chāndogya-upaniṣad*, but not even a jot of idea is indicated in this *Upaniṣad* to substan-

[1] *Indisches Studien*, 5 573.
[2] *Die indogermanischen Verwandtschaftsnamen*, 545 *et seq.*
[3] *Taittirīyasaṃhitā*, V, 6, 8, 3 ; *Maitrāyaṇīsaṃhitā*, III, 4.7.
[4] *Maitrāyaṇīsaṃhitā*, I 10.11 : *Śatapathabrāhmaṇa*, II, 5.2,20.
[5] *Śatapathabrāhmaṇa*, I, 3.1.21.
[6] See Böhtlingk's *Dictionary*, S.V.
[7] *Vedic Index*, Vol. I, 396-97.
[8] *Ṛgveda*, Translation by Arrowsmith, p. 18.

tiate the view that the law of marriage in India has had its foundation in the commandment set up by Śvetaketu.[1] The historical value of the tradition, therefore is not confirmed by collateral evidence, where it could have been naturally expected, and as such, its claims on our credulity are substantially weakened, being based upon a solitary record and that again in a legendary fashion.[2]

Secondly, it involves discussion whether the story of Śvetaketu alludes to a very early stage of the Aryan Society. Vedas, as described above, recognised marriage as a settled institution of high moral order in the remotest age of the Aryans. According to the learned view of Justice Dwarakanath Mitter,[3] the legend might have a reference to the Non-Aryans who were normally loose in their moral standard of life. Even in that case, however, the evidence does not conclusively prove the negation of marriage as we understand it biologically.

Thirdly, if the theory of evolution be advocated as the only explanation of the institution of marriage, then, it should have been surely regarded as a process of development and not as a result of sudden creation by individual legislation. Such legends, as Westermarck so pertinently remarks,[4] may be explained rather as disclosing the popular notion of ascribing all the great institutions to one wise legislator.

Fourthly, it is in question whether the aforesaid legend is based upon a conception of absolute promiscuity or the absence of definite sex-relation in an actually married life. The story clearly recognises the social unit of family life which could not have grown in the absence of marriage. It is to be considered in this connection that marriage as a central feature of definite social unit is recognised even where its sexual value is of less moral and of less rigid order.[5] In fact, the legend of Śvetaketu might presuppose a lax order of marital relation indicating the absence of moral constancy, which was sought to be abolished by the legislation of Śvetaketu. It also implies

[1] See Dr D. N. Mitter's *Position of Women in Hindu Law*, 1913, p. 201.

[2] See for this discussion the present author's *Development of the Law of Marriage in the Smriti Literature* (Thesis approved for the Jogendrachandra Ghose's Research Prize in Comparative Indian Law, Calcutta University, 1935).

[3] *Position of Women in Hindu Law*, 1913, p. 200.

[4] *Op. cit.* Vol. I. p. 106.

[5] See *Encyclopaedia of Religion and Ethics*, Vol. VIII—H. R. Rivers' article on Marriage (Introductory and Primitive), p. 423.

that public opinion had already set itself working towards the direction of such abolition.

On this question, Nilakaṇṭha, the commentator of the *Mahābhārata*, throws no inconsiderable light. He quotes two texts from the *Śruti* to show that the moral idea of marriage is as old as the Vedas. The following is the translation of the two texts: ' The man who indulges in sexual congress outside the wedlock is a thief and fœticide ' and ' the women who contract illicit love are subjected to pernicious disease.' The commentator equally explains that Śvetaketu was not the ultimate legislator on sex morality ; on the other hand, he had before him the precedents in the guise of the *Śruti*, in pursuance of which it was for him only to restore the discipline.

The foregoing observations may support the conclusion that the story of Śvetaketu, under our consideration, has very little to offer an explanation about the history of Indo-Aryan promiscuity. And it has been conclusively held that the so-called traditions do not negate the possibility of marriage, which is, above anything else, a biological institution.

To our surprise, however, we find, that K. P. Jayaswal, a reputed scholar on Indian topics, has relied not only upon the story of Uddālaka-Śvetaketu, but also upon the *mantra* of the *Kṛṣṇayajurveda*, cited in the *Manusaṃhitā*,[1] to confirm the promiscuous position of ancient Indian Society.[2] The *mantra* is read as follows: ' That pure blood, which my mother defiled by adulterous desire of frequenting the houses of other men and violating her duty to her lord—that blood, my father purify.' Kullūka, the commentator of Manu, explains that this text of *mantra* is to be cited as an expiation of the sin of immorality which may somehow attach to women on account of their natural proneness to infidelity.[3] It passes our comprehension as to how this text corroborates the postulate of sex-communism in ancient India. The text, as it appears to us, gives, on the contrary, a very clear evidence of the established custom of marriage and the imperative necessity of conjugal constancy. If this would at all point to promiscuity or rather absence of marriage, how could it prescribe a course of expiation on the violation of the purity of marriage ? All these references, therefore, merely signify the absence

[1] IX. 19.
[2] See *Manu and Yājñavalkya* (Tagore Law Lecture), XII, Sec. 1, footnote.
[3] See Kullūka's commentary on *Manusaṃhitā*, IX, 19.

of morality and not that of marriage. As Westermarck views that in no stage of human development on the globe marriage was inexistent, we in the same strain like to stress that India knows no stage at which marriage in some form or other was not prevalent. It is a fruitless task to establish the validity of the promiscuity theory with reference to any primitive society of the world, and India, in this respect, does not prove the least exception.

LOVE AND ROMANCE IN RECENT ENGLISH FICTION

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HERBERT Spencer breaks up the conception of love into nine constituent elements: (A) The physical feeling forming the nucleus of the whole—the sex impulse; (B) the feeling produced by personal beauty;[1] (C) the feeling of simple attachment; (D) sentiment of admiration, respect or reverence; (E) love of approbation; (F) self-esteem; (G) proprietary feeling; (H) love of freedom; (I) exaltation of the sympathies. He then observes that this passion acquires its irresistible power by the fusion into "one immense aggregate most of the elementary excitations of which we are capable."[2]

Exhaustive as the list may appear, it does not mention an important element—that of the protective and parental impulse. We see it, for example, in a story by Somerset Maugham where the woman thus speaks of her feeling for the man she is in love with: "There was always something maternal in that and protective."[3] So in "The Rainbow" by D. H. Lawrence the Polish woman fills Tom with a protective love which is thus stated: "He would have liked to think of her as of something given into his protection like a child without parents."[4] Havelock Ellis clearly recognizes this parental feeling as an element in love: "When the specifically sexual element in the conjugal relationship has fallen into the background, the emotional tone of the husband's love for his wife, and still more that of the wife for her husband, becomes easily that of love for a child."[5]

[1] It is not usual to find the importance of beauty minimised. For lovers have always delighted in it. But Mrs. Wentworth Williams thus objects to it; "One cannot ignore it. But it is a barrier; it is in fact rather a bore." (Virginia Woolf—Jacob's Room, Second Impression, The Hogarth Press, London, 1922, p. 232)

[2] Herbert Spencer—The Principles of Psychology, Vol. I (William & Norgate, 1899), p. 488. Stendhal mentions four kinds of love: (1) Passion-love, citing the love of Heloise for Abelard as a typical example; (2) Gallant-love; (3) Physical love and (4) Vanity-love (Stendhal—On Love, Duckworth & Co., 1920, pp. 19-20).

[3] Somerset Maugham—First Person Singular, pp. 41-44.

[4] D. H. Lawrence—The Rainbow, p. 33.

[5] Havelock Ellis—Psychology of Sex (Ray, Long & Richard R. Smith, Inc., New York, 1933), pp. 327-28.

H. G. Wells seems to suggest a new addition to Herbert Spencer's list in the form of a mate or companion: "Mate came before husband, wife or mistress in the story of life, and may outlast both of these relationships."[1] The words are put into the mouth of William Clissold who makes the observation while probing into his attitude towards Clementina on whose companionship he finds a guarantee for his mental serenity.

What inspires love in a woman? Wells makes Clementina answer this question. She says it is kindness and power. A woman loves "because she feels something stronger, safer, protective in the man."[2] But this unduly narrows the limits within which a woman makes her choice. Although a capable and masterly nature will still inspire admiration, the standard has lost its universal character in an age where there is not much call for physical strength as a means of giving protection.

There are certain other factors besides those already noticed which, first making love a necessity, paves the way for its appearance in an individual life.

Tom Brangwen in "The Rainbow" by D. H. Lawrence realised the need of love from a sense of incompleteness in himself. He was fragmentary and must remain as a nothingness until he was united to the woman at the sight of whom a strong light seemed to flare up within him, forging a burning link of secret power between them. Although he had decided that he could live by himself when she appeared not to take any interest in him, his self-control gave way and he told himself that "he must in the starry multiplicity of the sky humble himself and admit and know that without her he was nothing."[3] This deficiency and void recurs as a motive and justification of love in the character of Hermione Roddice, delineated by Lawrence in his "Women in Love."[4]

The ability to be amused by the same jokes draws two people together more than many weightier qualities of intrinsic value. This fact is brought home in a clever story by Alec Waugh,[5] which may briefly be summarised thus: Cecil Armitage and June Granta were both invited by friends to spend a week at Overmantle at a Georgian

1 H. G. Wells—The World of William Clissold, Vol. III, p. 760.
2 *Ibid*, p. 791.
3 Women in Love, p. 33.
4 *Ibid*, p. 17.
5 Alec Waugh—The Last Chukka (Chapman & Hall, Ltd., 1928), p. .

Country House. June was pursued by two lovers at this place, and each of them appealed to Cecil to make the coast clear for himself by engaging the other in talk. But instead of listening to their requests he contrived to send the two of them chasing each other and laughed over this with June as a very good joke. He soon found that from laughter to love-making was but a step. In short, he was accepted by June as soon as he proposed to her.

Huxley suggests that ennui and itch [1] are at the bottom of more than half of the world's ' affairs.' Sometimes they are lifted by imagination to the plane of love. Sometimes the work is done by experience, making two people form some permanent attachment. These ' affairs ' may be suddenly terminated as well, and then they end as abruptly as they begin.

The actuality of love often contrasts strangely with the ideal picture of love cherished in the mind. Philip [2] had indulged in a glorious prevision of love. He imagined himself in a ball-room where he would suddenly turn round and see *her* with the knowledge " that the gasp in his throat was in her throat too." " She was tall and dark and beautiful with eyes like the night." He would greet her unhesitatingly and she would respond, murmuring, " You've come at last." But in place of this ideal woman, he was in love with Mildred Rogers, a waitress, whose name he thought grotesque, and whose features seemed unattractive if not positively repellent when he went over them one by one. This was not all. He was aware of her vulgarity, the emptiness of her mind and her odiously genteel manners and speech. Philip recalled her insolence and in the next moment he was wishing to box her ears. But the deep distaste the thoughts raised in his mind seemed by some magical process to become converted into a deeper tenderness. " Perhaps it was the thought of hitting her or the recollection of her tiny, beautiful ears, he was seized by an uprush of emotion.....He wanted her." [3] Far from discovering rapture

[1] In the language of Psycho-analysis it will be described as *libido*.

[2] In " Of Human Bondage " by Maugham, p. 342. The title of the novel has evidently been taken from Spinoza's " Ethics of Human Bondage or the Strength of the Emotions."

[3] *Ibid*, p. 343. In another novel (" The Painted Veil ") by the same author, the lover confesses to a knowledge of his mistress's stupidity, fully conscious of a passion he cannot conquer. The situation there is similar to the present one, although Walter Fane, the hero of the story, is not merely the lover of Kitty but her husband and during his married life of two years he has treated her with the greatest kindness and consideration. His opinion of her was his secret which he sprang on her when he discovered her intrigue with Charles Townsend and her desire for a divorce. Walter thus speaks to Kitty : " I had no illusion about you," he said, " I knew you were silly and frivolous and empty-headed. But I loved you.

in love, Philip was dismayed to see in it a bitter anguish such as he had never known before. With her he was in despair, without her in wretchedness. But the faults which were so apparent in her character and appearance did not wean him from his love. On the contrary, he loved them too. He thus felt in him a strange force which swayed him against his will, contrary to his interests.

Francis Chelifer [1] has experiences of love which bear some resemblance to those of Philip, discussed above. When he saw Barbara he was an adolescent, and his feeling assumed the form of a religious passion. In her presence he was awed and felt something like fear as if he had been in some mysterious way transported into the presence of life itself. Chelifer had "desired all beauty, all that exists of goodness and truth, symbolized and incarnate in one face." [2] But Barbara was entirely different from this idealised picture. She was selfish, thirsty for pleasure of the most vulgar sort, was stupid and a liar. Chelifer realised her distance from the ideal he had cherished in his mind and saw that no possible possession could make him happy. Yet he would persist in believing that Barbara was in some unaccountable manner related to his ideal, and loving the ideal he found his desire for her becoming more and more fortified, in spite of all the facts which his reason could suggest to him. The emotion he felt did not submit itself to the curb of the rational element in his personality, and he endured all the pain and humilation which could arise from being slave of such a mistress.

One of the characters in the same story seems to be very near the mark when he says: "After all, the person you're really violently in love with is always your own invention and the wildest of fancies."[3] But this is no discovery. Every age recorded it in its own fashion. Shakespeare wrote about it in his sonnet on Blind Love:

> "O me! what eyes hath Love put in my head
> Which have no correspondence with true sight."

I knew that your aims and ideals were vulgar and commonplace. But I loved you. I knew that you were second-rate. But I loved you." (The Painted Veil, Wm. Heinemann, Ltd., 1926, pp. 78-79). But Walter Fane was not anxious to be loved and he found all the satisfaction he needed in loving Kitty. He was prepared to receive as a favour what most husbands expect as a matter of right.

[1] "Those Barren Leaves" (Rotunda), p. 146.

[2] *Ibid*, p. 71.

[3] "Those Barren Leaves" (Rotunda), p. 71. This view may be compared with what d'Alcacer tells Mr. Travers (Joseph Conrad—The Rescue, J. M. Dent & Sons Ltd., 1920, p. 120): "You do not love because of what is in the other. You love because of something that is in you—something alive in yourself.....A capacity in you. And not every one may have it—not every one deserves to be touched by fire from heaven."

It is interesting to note in how many different ways love manifests itself in the life of a single man. Whether it progressively increases its power as it gathers fresh experience by periodically changing the object of its attachment, as Shelley seems to suggest in the lines quoted below, is a problem which is not going to be discussed here. Proof of opposite kinds may be brought together and the conclusion left indefinite unless perhaps it is that in loving as in other things mistakes are possible, and that more than one experience may be needed to correct them. Shelley's views are extreme and it is difficult to accept them as true:

> " Love is like understanding that grows bright,
> Gazing on many truths;.....
> Narrow
> The life that wears, the spirit that creates
> One object, one form, and builds thereby
> A sepulchre for its eternity."[2]

Such a point of view will break up social cohesion and deprive love of its age-long sanctity. The standard of the poet, however, is not the standard of the world, and a single attachment if deep and abiding is never held to be undesirable. Birkin, for instance, wants to love and realise " the finality of love " by which he means " just one woman."[3] But it is admitted as possible that a man will fall in love more than once. William Clissold, to refer to an example, met three women whom he loved in succession and the relationship in each case was " unique in root and branch and substance." How the three women moved him may best be indicated in Wells's own language: " With Clara I was animated by the sexual egotism of the young man, with Sirrie by a profoundly tender protectiveness, with Helen by the glamour of a beautiful personality."[4]

Walter[5] was simultaneously in love with Marjorie and Lucy, although the latter undoubtedly exercised a greater fascination over him. Men have usually been held to be polygamous by instinct

1 " True the ideal is one woman—but how find her, except by trial and error?" Richard Aldington—All Men are Enemies, (The Phœnix Library, Chatto and Windus, 1935).
2 Epipsychidion, lines 163-64, 169-73.
3 Women in Love, p. 58.
4 The World of William Clisso , Vol. II, p. 551.
5 In " Point Counter Point."

while monogamy is thought more natural to woman.[1] Masculine detachment is suggested by Aldous Huxley as an explanation of man's ability to get pleasure out of chance encounters. Women are differently built and they cannot accept anyone without being in love more or less. Huxley draws the character of Lucy as an exception. " She can separate her appetite from the rest of her soul."[2] Havelock Ellis, however, holds that women are as wide-awake to the charm of novelty and variety as men are and that they are " just as able—if not better able—to love two persons at the same time."[3]

The languor and listlessness along with an unconsious waiting which come from love's supremacy over all other feelings have been beautifully depicted in the following passage: " Strolling in at the dusk, Sandra would open the books and her eyes would brighten (but not at the print) and subsiding into the arm-chair she would suck back again the soul of the moment ; or, for some time, she was restless, would pull out book after book and swing across the whole space of her life like an acrobat from bar to bar. She had had her moments. Meanwhile the great clock on the landing ticked and Sandra would hear time accumulating, and ask herself, " What for? what for?"[4] Yes, what for? Unless it was to explore the mystery of love and make life yield all the joy it held in store.

A view regarding the nature of love is proposed by D. H. Lawrence, which militates with many of the cherished ideas on the subject, such, for example, as those in Shakespeare's Sonnet No. CXVI[5]. It is a reaction against the romantic conception of love, and denying supremacy to love it insists on putting it on the same level with the other emotions. According to this view, love is only part of any human relationship and like sorrow or distant joy it cannot always be felt[6]. Neither is it all-satisfying. For at the very last, one is alone, beyond the influence of love.

1 This view is popular rather than scientific, for Keyserling writes : " Primarily, every one is by nature polygamous, and woman more so than man as her eroticism is more delicately graded." (The Book of Marriage, pp. 5-6, Jonathan Cape, 1927.)

2 Point Counter Point, p. 401.

3 Havelock Ellis—Psychology of Sex, p. 339.

4 Virginia Woolf—Jacob's Room, p. 263.

5
Let me not to the marriage of true minds
Admit impediments Love is not love
Which alters when it alteration finds,
Or bends with the remover to remove;
O, no! it is an ever-fixed mark
That looks on tempests and is never shaken;
It is the star to every wandering bark.....

6 Women in Love, pp. 133, 150.

A habit of chewing the cud of recollection, of living over again the past, and minutely examining the least little word, look, or smile appears to be common to all lovers. Philip[1] spent long hours in interpreting the smiles and phrases of Mildred, and Stephen[2] on returning from Mary analysed " those nothings, questioning their nothingness, making out of things too submerged and impalpable..... promises and indications."

Love has been described as a kind of rebirth, like being born again. But this rebirth comes after a kind of sleep to which also a comparison has been suggested. Love like sleep is thus a source of freshness, revival, although it may be " vulnerable as a baby that just comes into the world."[3]

There is at least one picture of a woman in contemporary English fiction who liked the idea of love, although recoiling from lovers, whom she always wanted to hold at an arm's length so that she could carry on " a cultured and verbally burning love by post. A correspondence course of passion was for her the perfect and ideal relationship with man."[4] This is no imaginary picture. In real life there are women who have a nun-like quality in them, suggesting a Quaker austerity. They have generally a predisposition for things spiritual, and if they ever fall in love it is to satisfy an imaginative impulse, divested of all the associations of an earthly love except the language in which its ardours are sometimes painted.

It is in common experience that conflict often contributes to the heightening of love. Lovers will one day find their relationship chilled and frozen by a quarrel or misunderstanding. Their happiness will seem to be at an end and they will even feel each other's presence too upsetting to endure. Next day the clouds will all dissipate and a pure love will come in sunbeams between the lovers. The appreciation of this fact has led to many delightful scenes of idyllic happiness being painted. One of great beauty occurs when Anna[5] saw in William something of all-comprehensive value to her—he became sun, moon, and stars in one, after a day of strained relationship under the stress of which all life seemed ruined, desolate, and laid waste.

[1] In " Of Human Bondage " by W. Somerset Maugham.
[2] In " The Passionate Friends " by H. G. Wells, p. 59.
[3] Women in Love, p. 194.
[4] Aldous Huxley—Point Counter Point, p. 89.
[5] In " The Rainbow " by D. H. Lawrence, p. 156.

The worshipful attitude [1] in love which addresses itself to the best in a man, refusing to deal with those faults and weaknesses which constitute an integral part of the character, will often appear irritating to the object of idolatry. Nobody will care deliberately to climb down from the pedestal where he is installed above all human failings but the rarefied atmosphere of such a region does not supply the nourishment needed to sustain life. Hence there will be a feeling of resentment, even of hatred, for thus falsifying facts and the individual man or woman will perpetually oscillate between the pleasure of gratified vanity and the resentment caused by having to play a part. Thus Paul[2] half the time hated Miriam and yet could not leave her, because in one way she did hold the best of him. He could not stay with her because she did not take the rest of him and Paul saw in his acceptance by Miriam the combination of flattering admiration and humiliating disregard.

Love divorced from a sense of respect fails to satisfy. It may have everything else that is necessary—the fascination of mystery, and the affection bred by familiarity. A woman would love the common movements in a man when he has raised admiration in her by habitually suggesting power and energy. She would respect him as far as he is related to her. But she would disppoint him when her curiosity would not take her to the work and ideal in the midst of which the man feels at home. She may have nothing to do with them, but they supply a key to the personality of the man and reveal the manner in which he specially desires to be admired and respected. The sense of deficiency which love experiences sometimes show proceeds from the lack of comprehensiveness in the emotion when it chooses only a few elements from the human personality as object of special attention and leaves the rest out in the cold.[3]

After all that has been said to indicate the different forms in which love has manifested itself in contemporary fiction, it may be well to remember that a great passion is by its nature incommunicable and that no amount of analysis will reveal its subtle being which

[1] Hamar in "An Indian Day" pours out his love to Hilda Manneiing in a passionate language and says: "You are not a woman, you are a goddess!" (Edward Thompson—An Indian Day, Ernest Benn, Ltd., 1931, p. 127). Hilda's reply was, however, entirely discouraging: "You have not known me, I have not known you .....I thank you with all my heart. But it is impossible." (p. 129.)

[2] D. H. Lawrence—Sons and Lovers, p. 309.

[3] The Rainbow, p. 160.

like rainbow or the fire breaking into star showers must be realised by means of a direct experience.[1]

In conclusion it may be observed that the restless age through which we are now passing has analysed love without deeply feeling it. Hence although the study of fiction will yield hundreds of aspects in which this emotion has been conceived, it will scarcely bring us into contact with love whose absolute nature is preserved against the intrusion of charm-dispelling philosophy or some view or circumstance which robs it of its primacy. The present age lacks faith and spontaneity and is too much dominated by a technique of behaviour to permit men and women to appear in their true nature. Besides, the enfranchisement of women having brought them out of the domestic sphere has deprived them of some of the glamour by which they were once surrounded. Women too have become sceptical—and love has been dethroned from its heights to play physician to a sense of ennui by which men and women are often oppressed. In spite of all this, however, even this disillusioned age affords glimpses of it showing that when the thirst for knowledge and psycho-analysis becomes a little assuaged, love will emerge into something rich and strange, ascending to that heaven where the imagination of ancient poets and philosophers had assigned it a home.

[1] H. G. Wells, in William Clissold, Vol. II, p. 549, has thus emphasised this fact, "The essence of every great passion is by its nature a thing untellable."

UNDERSTAND YOUR CHILDREN

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THE present century is that of the child. On all sides there is an increasing interest in the child, his nature and his needs, and a growing concern is manifested over his welfare and education. It appears as if the child has just been discovered and in a sense it has been, for fresh knowledge of child development, new ideals and methods of education, habit clinics, mental hygiene, experimental schools are not only in vogue but have forced us to revise our every-day attitude towards children and their ways. Every advance in our psychological knowledge of children has revealed to us larger possibilities of their education and has strengthened our faith that through a fuller education and the right guidance and environment the inherent goodness in human nature can be brought out and freer and better adjusted personalities can be developed. So deeply has this realisation worked into our everyday thought that we have not infrequently begun to demand, secure and establish what we call "the rights of children." Our traditional attitude towards them is one of vacillation and easy indifference. Many of us in India think that our children belong to us by an inherent right, they are a part of our indisputable and absolute possession as are our cattle and womenfolk and it is nobody's but our look-out how we treat them, whether we educate them or not, or how well or ill we educate them if we educate them at all. Others think that the child is always with us, why be so urgent in attending to his needs? His education at home is a matter of adult leisure and recreation. If we learn about any of his harmful traits we are inclined either to minimise their importance and excuse him for being a child, hoping that he will outgrow such harmful traits with age, or to take too radical if not too monstrous a step of beating, strapping or practising some ingenious device of mental torture. But if the child is the father of man, if he or she is the man or woman of tomorrow, can there be anything more urgent and important than the demands of his physical, mental and moral growth

and should not we bring in the latest and the most reliable scientific knowledge to bear upon the supreme and vital task of child upbringing ? Parenthood is a sacred trust, it involves not only privileges but also obligations. Every parent is a trustee of the future progress and happiness of the race and it is his bounden duty to work for it with knowledge and care.

Let us try to understand in greater detail some of the values and purposes of child study. What after all is the use and objective of getting into closer contact with the little people at home and what new advantages are likely to accrue both to the teacher and to the parent from such knowledge and understanding of childhood ? The problem is anything but simple, and that for two reasons. In the first place the child is a growing personality and we have to obtain a genetic picture of individual development through all stages. No one stage is intrinsically more important than another. Each has its special scope, it leads to the other and should be studied and treated in relation to that which follows. Secondly, our knowledge and insight in this field is growing day by day and with this growth newer values are sure to dawn on us.

We cannot help educating our children—if not intentionally, then unintentionally. The process of education starts very early and goes on irrespective of whether we will it or not. The child from inner necessity is urged on to react to his environment and is in its turn affected by it. This education is inevitable and its tragedy is that it has no direction, no motive and no purpose. The child drifts on rudderless in a world of chaos. Its only hope is the parental instinct. In the past when life on this globe was simpler, this instinct was sufficient to guide the child through such difficulties as he had in his early years. Today life is thoroughly socialised, so closely knitted round highly evolved institutions that this instinct alone simply will not do unless it were controlled and educated to meet everchanging demands and situations. The paternal instinct, suited so admirably to the needs of the primitive life, fails to deal with those of the present age. Its inadequacy has been brought home to us by the recent growth of psychological knowledge and its manifold applications to the study of children. It has revealed to us that the earliest days of childhood play a rôle whose importance has so far been grossly undervalued, not to say completely ignored, that before the age of ten when the task of education is popularly believed to begin, the child has

formed most of the "mind sets," received most of the shocks and is no longer as plastic as we assume it to be, and that most of the stubborn mental disorders and consequent instability, so widespread in minor degrees, are traceable to the early repressions and taboos. Should we in the presence of so much reliable knowledge, resulting from methodical analysis, allow ourselves to be guided by blind faith, superstition and impulse ? If knowledge and science give understanding and discrimination, if they impart direction and purpose to all that we undertake, certainly they are needed most in the all-important business of education, child-study and child guidance. If our influence on the development of children is inevitable, let it be modified by science, knowledge, understanding and discrimination, rather than be controlled by blind impulse which may work for good or for evil. "Understand your children for I am sure you do not know them." This reproach of Rousseau administered to Europe more than a century back may well be administered now to parents and teachers in India. If we wish to improve, extend and vitalise education, our efforts and measures should be based on our knowledge of child nature and his needs. If childhood shows the man as morning shows the day, if it reveals the potentialities, the extent and scope, of his future development and perfection, it deserves far more attention, understanding and consideration than it has hitherto obtained. Only then can we hope to eliminate a good part of the waste and miseducation that has become a fashion to bemoan.

Almost every parent has the good and welfare of his children uppermost in his heart. He feels perturbed over any slightly undesirable trait displayed by his child. Most of the parents are quite conscientious in their anxiety about the welfare of their children, but they themselves are responsible for their education. What a child becomes in later life is to a large extent the reflection of his parents' ambitions and wishes, their hopes and fears, their thoughts and ideals, in brief their entire behaviour and attitude towards the child. If parents realise this, they should start worrying as to what they should do, how they should set about the task of his education and how they should modify their own behaviour towards him. Let their sense of responsibility steer clear of vague anxiety and fears, and become constructive by calling aid of knowledge and wisdom. Let them not learn half-truths about children

through haphazard trial and error, for slight mistakes may have very far-reaching consequences. Let them profit by our fast-increasing knowledge of children and through understanding manipulate the environment, adapt it to the needs of their child and thus assure a wholesome growth of his personality. The undesirable traits of the child will no longer alarm them but will present them fresh opportunities for knowing, and thereafter educating, their child better. Thus child-study and understanding will dispel doubt, anxiety and alarm which disturb and mar domestic peace and consequently the growth of children.

But inducements to understand children aright are not only subjective and domestic but also social. If children are successfully educated, they benefit not only themselves and their parents but also society at large, in which later, as adults, they will live, move and have their being. Thus it is that child education and guidance offers vast opportunities for social reform and reconstruction. Looking about us today we find that in no age was society more unstable than it is at present. "Everywhere old forms are collapsing, old methods are proving futile. Chaos is increasing, civilisation is endangered." But whether this change is for the worse or for the better, it no doubt calls for a readjustment, a new orientation in almost every direction and we are face to face with the problem of creating a culture adapted to modern life, of building a new and better world. The brick and mortar for building this humanity of tomorrow is a living material which grows, develops and hardens into shapes too difficult, if not impossible, to alter and recast later. Any attempt, therefore, to engraft the new culture on humanity must begin with the early impressionable years of childhood. What children are and what they can be should be of prime importance not only to the parent and the schoolmaster, but also to the legislator, the priest, the public worker, in fact to everybody who is anybody in the wild field of educating the younger generation to "a finer shape, a fuller reality."

One of the most important truths which knowledge of child life has made clear is that the child and the adult differ not only in degree but also in kind. Two decades ago even front-rank psychologists held this view that there was no reason for studying the mind of the child as distinguished from the mind of the adult. They maintained that "if we could find out how the mature mind was constituted and how it functioned, we would know how the child mind was constituted and

how it functioned, because the latter was simply a miniature copy of the former." They did not realise "that in the development of the human mind from birth to maturity changes occur which make it different, not only in strength or range or power but also in other important respects, in the adult stage from what it is in infancy, childhood or youth." * Even today many people really believe that the child is a small man or woman. Nothing could be farther from truth or a greater injustice to child nature. Do you measure the food needed by a young man of twenty and divide it by his years to find out the amount of food needed by a child of one ? Or do you decide it by proportionate weight or size ? Does the doctor prescribe for the child simply the twentieth part of what he would have prescribed for the young man of twenty ? Does the teacher administer to the first primary class one-tenth of the knowledge he imparts to the tenth class boy ? His food, treatment and education are decided on a different basis than a merely mathematical proportion. The child is a creature different from the adult. His needs and problems are different, to understand him in the light of adult motives and impulses is to understand him not. The mental life of the child has its own laws and we grown-ups find it difficult to study because we have forgotten how we used to feel and behave when we were children. Besides children are ever growing and changing. Today the child is different from what he was yesterday and he will be still different tomorrow. This observation may be discounted by many whose knowledge of children does not go beyond that of outward features and behaviour. No doubt the child continues to be the same physical mechanism, he has the same sensitive organs and his responses are not very much different from day to day, but his interests and attitudes do suffer rapid and constant changes. What appeals to him today, stirs his imagination and commands his attention, may pass unnoticed tomorrow. At one time he is susceptible to some influences and quite indifferent to them later. Children cannot help us to understand them for they are not likely to understand our catechism. They are quite innocent of adult logic and their answers would hardly satisfy our standard. The child is original ; the same act may have different motives in the child and in the adult, in different children or in the same child at different times or ages. An adult breaks a thing because he no longer regards it as valuable, because it has annoyed him,

* O'Shea—The Child : His Nature and His Needs : Children's Foundation.

or because he wishes to annoy its owner ; and a child may break and destroy things because he loves them and out of his love wishes to move them more rapidly than they orninarily would, because he is so full of energy that he cannot sit still, wishes to do something, to work a change in his environment and throws it to have the sheer joy of exercising his limbs, because he is curious to know what will happen when it is broken, or because he is tired of playing with it for so long. For children the distinction between constructing and destroying does not exist, for they have no knowledge of the values of things, and when they construct or destroy, they do so most often to satisfy their sense of self-expression, both physical and mental. Thus all those who have anything to do with children should guard against the danger of considering the child as a mere miniature copy of the adult and of interpreting its behaviour in terms of adult motive and interests.

Among children as well as among adults, the fact of individual difference is too patent to pass unnoticed. No two children are alike. They vary in size, health, knowledge, intelligence, temperament and in numerous other characteristics, physical, mental and social. "There are the giants and the dwarfs, the tall and the short, the blondes and the brunettes, the beautiful and the ugly, black and white, good and bad, choleric and phlegmatic, brilliant and stupid, blue-eyed and brown-eyed, and other extremes too numerous to chronicle. Between these extremes there are all grades and shades of apparent difference. Besides these obvious differences there are innumerable variations which are not so apparent and hence thought not to exist." * This fact of individual differences has some important bearings on child study and guidance. In the first place every child should be given individual attention and study. Though parents and teachers are called upon to study children in general, to know what general tendencies and impulses they display, to trace their growth and development under certain general influences and to label them into certain general heads as superior, inferior or normal, they should know their children individually and intimately in the light of this knowledge of childhood in general. They should proceed to apply this general knowledge to the particular child they have under their charge after due consideration of the peculiar situation, influence and environment in which he is being brought up. The science of child study can only indicate broad lines of child

* Bolton—Psychology for Teachers.

guidance and in view of numerous individual differences among children, individual deviations of treatment shall have to be determined by individual parent and teacher in the light of what he or she knows about his or her child. The vast amount of knowledge about children should only help to suggest, not prescribe, what treatment and guidance your child needs. Do not treat children *en masse* nor think that the method which helps your neighbour with his child will help you with yours, though you can profit by his experience. Each child is a unique individual and deserves and needs individual treatment.

Again, we should not fret if children under our charge do not turn out to be just what we would like them. Often parents get impatient, so that even though their child is quite healthy and normal both in body and mind, he is far different from the spirit they had wanted to infuse into him. This alarm is baseless, for every child starts with his own mental capital and invests it in his own way. His slight variations from the parent stock, far from disappearing, grow, for it is not easy to provide identically similar environment and thus lead him to develop different tastes, inclinations and traits.

In a family with more than one child parents should recognise the fact of individual variations a bit too well. They should know that while A takes to heart every piece of instruction, B treats it lightly and C is sure to go against it impulsively. Parents who recognise this difference do not treat each child in a uniform way, under pretence of fairness and justice, but modify their attitude and treatment in the light of each individual child's temperament and mental make-up.

Another fact that the scientific study of child life has emphasised is that the process of education starts very early. Even long before parents have any idea, the infants under their care are forming their mind-sets and permanent attitudes to life and environment and hardening into shapes which later it will cost dear to alter or reconstruct. Whately tells of a mother who once asked a clergyman when she should begin the education of her child, who she told him was then four years old. "Madam," was the reply, "you have lost three years already. From the very first smile that gleams over an infant's cheek your opportunity begins." The earliest days of childhood play a rôle whose importance has so far been grossly underestimated, not to say completely ignored. It is usually assumed that the "serious task" of education must begin round and about the twelfth year of life. Some persons hold that before a child is seven years old education is of

no moment. Now according to the findings of psychologists, a child of seven has already gone beyond the age when its affective life is plastic, for the decisive shocks come before the sixth and even before the fourth year. A child of tender age should never be handed over to the care of second-rate persons. Psycho-analysis emphasises the fact that a very young child's psychical development is already well advanced and extremely complex, so that education is of primary importance from the outset. The mind is extremely sensitive and, as ' psycho-analysis ' has revealed, receives several rude shocks in infancy, as for example, at the time of weaning. separation from mother or from fraternal rivalry. A wise parent will take care that such shocks are made as mild as possible through understanding, sympathy and goodwill.

Again, the danger of studying and interpreting child behaviour in isolated acts is very great. A child is an incipient personality, his mind and character is an organic growth and his casual behaviour is a poor index to what he is now or what he is likely to become in future. If the same owtward act can be differently motivated in different children or in the same child at different times, it is very necessary to know him more intimately in greater detail and to interpret his motives after due consideration of his habitual behaviour. Study the child as a whole, not piecemeal. The integrated whole can seldom be deduced from our knowledge of the parts, the functions of the organism are something more than the functions of mere organs. Therefore, if we are to deal with children at all, we must deal with the entire child. That should be the focal point in our study. Instead of singling out particular acts and activities of children, we should try to reach the basic unity of individuality which underlies them. To that end it is very necessary that we know the child-in-relation ; we should know the child at home, the child in school, the child among his playmates, the child among his brothers and sisters, and so on.

Child study and guidance is keenly alive to the influence of parents and teachers themselves. Both of them most often forget that they themselves are a very important and effective part of their children's environment. They are not only responsible trustees of the child's possibilities of future growth and development but also an inevitable model for the child to follow. The parent needs to be a good example, a good model for the child, to copy and try to emulate. Children are so situated that quite instinctively they desire to be like their

parents. "The parent is the first model and it is very important that it should not fail. It is not what the parents say and profess that is of significance, rather it is what they do and what they are. Wise parents will not only preach, instruct and coax but live and practise those ideals with which they wish their children's personalities to vibrate. They will share their children's joys and sorrows, tasks and tribulations, their play and work most intimately and informally and it will be during this intimate and informal community living that they will be able to project into their children's personality details of desirable standards of moral and social conduct. When there is a mutual give and take, and a bond of respect based on understanding and sympathy, an acceptance of each other's values develops more easily. Verbal instructions and precepts do not avail if they are contradicted by the everyday behaviour of parents and teachers themselves. If the latter behave consistently, conduct themselves with dignity, honesty, frankness and sympathy, if their actions are marked by spontaneity and self-control, if they are masters of themselves and hold out a worthy example, the children under their charge will surely develop the same ideas and ideals. Adults are a very powerful part of the child's environment and their influence will be for good if they set a worthy example in their own behaviour.

The most common defect in the attitude of parents towards children is over-repression. The child is not allowed to feel and behave as a child and to develop its incipient personality along lines suited to its inherent nature. No doubt the behaviour of the child in early age is crude and undirected and will continue to be so if it is not adequately directed by education, example and precept. But to many parents this direction means nothing less than a continuous and uncompromising system of "don'ts" which provide but too little opportunity for self-assertion and the development of initiative. Children are hedged in with prohibitions and repressions that stifle any spark of initiative that may be smouldering within. Parents dominate them autocratically and they lose all self-confidence and courage, growing into timid, dull and stupid people. Do not, therefore, in the name of discipline, order the children about and deprive them of legitimate freedom for play, assertiveness, initiative and social intercourse. Let them breathe greater freedom, trust and courage. Let them take the initiative in as many things as possible, make a choice and arrive at a decision. Let them meet difficulties in the way and

solve them. Give them more opportunities for self-expression, originality and development. In fact, let every child be a child. " The child has a right to be a child. The more completely he is himself, the more apt he is to become an adult who is worthwhile."

But with the best of intentions and effort on the part of both the teacher and the parent, the child may not be able to adjust himself easily to the new situation and may develop traits and attitudes which interfere with his adjustment in the family, school or social group. He may grow to be a problem or difficult child whose behaviour is not in line with those who surround him and who is a source of trouble and annoyance to his elders. He may be addicted to telling falsehood, stealing, phantasy, disobedience, to any of the several forms of social maladjustments. Sometimes his behaviour is the result of very commendable motives but the method he follows to carry them out is at fault. A desire to please is not a bad motive but if it leads to stealing money from home in order to buy tit-bits for friends, it is hardly desirable. Such problems in child behaviour are common both in the home and in the school. How are we to tackle them ? Very often such problem behaviour has developed inspite of the effort and care on the part of the parent and the teachers, due to influences over which they have no control nor are likely to have any. But this does not mean that they should excuse themselves on that account and sit down under a feeling of despair and ineffectiveness. Mental hygiene offers the hope and the regimen. Let them set about studying such behaviour, find out its peculiar motives and circumstances, alter undesirable influences and environment, and re-educate the child to a better social adjustment. Happily we have amassed a great deal of knowledge about children based on extensive studies of individual behaviour and in its light it is growing more and more possible to re-educate children to a healthy and harmonious living, integrate and absorb them into the community and ensure social progress, for without harmony progress loses both meaning and value.

Parents and teachers and all who are in any way responsible for the upbringing of children should work with understanding, knowledge, insight and sympathy to make their wards normal, that is, like the great majority of people, capable of growth, development and achievement. A normal child will have normal lapses such as he will outgrow in the course of development. A child throws things, cannot carry his cup as well as we do, cries at the smallest provocation or obstruction

but we do not take much notice of them for we are confident that with age even unassisted he will steer clear of these handicaps. Thus a normal child is not a perfect or ideal child: such a one would have his abilities so fully developed as to leave no room for further development. On the other hand the normal child will require all the help and encouragement which the common run of children requires. He will be neither super-normal nor sub-normal. Of course, it is difficult to draw a hard and fast line to denote the average or the normal, and most of the children do show slight deviations from the normal on the plus or the minus side, for after all we are dealing with growing organisms, not static things. But there is certainly a standard of efficiency which most of us can expect from normal people. The super-normal, quicker at knowing and doing things, will need superior opportunities for a freer and fuller growth of his superior abilities, and the sub-normal, inferior in knowledge and accomplishment, will need an extra dose of attention and encouragement to breathe greater self-confidence and come in line with the average. Mistakes every child makes. Whoever grows, tries, errs and improves and the child growing at a rate far faster than the adult is liable to make more numerous mistakes and stumble at every new advance. But his lapses, far from being run down and condemned, should be approached with love and sympathty. A friendly lead, a kindly word and a helping hand will smooth the course and avert the stumble.

ADMINISTRATION OF PUBLIC EDUCATION IN FRANCE

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FOR administrative purposes France is divided into 90 districts (*départements*). Each *département* is sub-divided into several *arrondissements*, and each *arrondissement* into a number of *cantons*, the latter comprising several *communes* which are the smallest administrative units. For administration of Public Education three or more *départements* are grouped under one *Académie* ; there are 16 *Académies* in France (excluding the Academy of Algeria).

The Minister of Public Education controls the majority of educational institutions, though some of his colleagues in the cabinet have sole authority in the management of certain types of institutions ; as for example, the agricultural schools and colleges are in the hands of the Minister of Agriculture ; the deaf and dumb schools and the school for the blind are under the Minister of Public Health ; the naval school is administered by the Minister of Marine ; the national school of mines and the national school of civil engineering are controlled by the Minister of Public Works ; the polytechnic school, the Saint-Cyr military school and other special schools are under the Minister of War ; the technical schools of all grades were, until recently, under the Minister of Commerce. The existence of more than one head causes some complications in educational administration, and hence public opinion to-day in France is in favour of placing all educational institutions under the Minister of Public Instruction.

The Minister of Public Instruction has wide powers in general administration of the education department ; he makes all important appointments except the following—Rectors of Academies, Directors of Education, Under-Secretaries of Education, Inspectors-General, Academy Inspectors, and Professors holding chairs in the Universities. These appointments are made by the President of the French Republic. With or without the approval of the Higher Council of Public Instruction the Minister can introduce any change in the

programme and methods of teaching in State schools ; he can create new posts and abolish existing ones ; he determines the amount payable as subsidies, scholarships, and maintenance-grants ; he issues orders from time to time affecting all grades of education ; and he is the final authority in deciding appeal cases coming up from the Lower Courts, University Councils, Academy Councils, and District Councils of Primary Education.

The Minister is assisted by two Under-Secretaries, one of whom is in charge of Technical Education, and the other is in charge of Fine Arts (*Beaux Arts*). Under each of them there is a Director-General. The Minister is assisted by four Directors—Director of Higher Education, Director of Secondary Education, Director of Primary Education, and Director of Accounts and Staff. All these Directors, Directors-General, and the two Under Secretaries hold their offices in the ministerial building at Paris.

Attached to the Ministry are a Higher Council of Public Instruction and a Consultative Committee. The Council consists of members of the teaching staff nominated by the President of the Republic, and representatives of the Institute of France, the College of France, the Universities, the secondary schools—lycées and collèges, and of the primary schools. The Council holds its sittings under the chairmanship of the Minister, decides the programme and methods of teaching in State institutions, makes necessary modifications of administrative regulations, issues instructions for conducting examinations, advises on the supervision of private schools, and considers applications of foreigners desirous of opening schools in France. The Council has to deal with a number of other questions, such as frauds committed during examinations, disciplinary measures for gross misconduct on the part of teaching staffs of public as well as private schools, unsettled disputes between local authorities and private organisations desirous of opening new schools.

The Consultative Committee of Public Instruction comprises three sections—one for Higher Education, one for Secondary Education, and one for Primary Education. It is composed of representatives of the teaching staff, and of *ex-officio* members—Rectors and Inspectors-General. These sectional commitees hold their sittings under the chairmanship of respective Directors, and submit their proposals to the Minister regarding filling up of vacancies. For

administration of Technical Education there are a special Higher Council and a Consultative Committee.

For Fine Arts the following councils have been instituted—a Higher Council of Fine Arts, a Higher Council for teaching of Fine Arts, a Council of National Museums, and a Higher Council of National Conservatory of Music and Elocution.

The Minister is assisted also by Inspectors-General, and Local Educational Authorities. The Inspectors-General visit local institutions, and see to the proper functioning of these in accordance with the Ministerial orders ; they submit their reports to the Minister through Directors. The general inspecting staff for supervising higher education has been dispensed with recently. The general inspecting staff for secondary education consists of six Inspectors-General for supervising the teaching of arts, four for science teaching, one for music, one for drawing, one for agricultural subjects, one for supervising the administrative services. Besides these, there are four Inspectors-General in charge of primary elementary education, and four Inspectresses-General in charge of nursery schools.

The power of administration is vested in the Rectors of the *Académies*, the *Prefets* of the *départements*, and in the Mayors of municipal *communes*.

At the head of each Academy is a Rector who is responsible for higher, secondary, higher primary, and technical education. The Rector is assisted by as many Academy Inspectors as there are *départements*, and by an Academy Council and a University Council.

The Academy Council consists of three types of members: firstly *ex-officio* members—Rector, Academy Inspectors, and Deans of Faculties ; secondly, members nominated by the Minister from amongst the heads or *Proviseurs* of the secondary schools, and members of general and municipal councils ; thirdly, representatives of secondary school teachers of whom two must be representatives of the private schools. The Academy Council deals with all important matters concerning secondary education. The University Council is responsible for administering only university education.

The *Prefet* who is the administrative head in the *département* is nominally in charge of primary education. He is assisted by the Academy Inspector and advised by the General Council and by the

District Council for Education. It is he who appoints teachers in primary schools on the recommendation of the Academy Inspector.

The General Council has its representatives in the governing bodies of training schools, écoles normals, and in the district Council for primary education. Each *département* must provide and maintain two normal schools, one for boys, and the other for girls, and thus the General Council is to grant every year recurring expenses for purchasing school equipments. The State pays subsidies up to 50% of the total cost for acquiring sites, constructing buildings, and for electric and other installations in normal schools. The State also provides salaries of teachers, and gives maintenance-grants to the pupil teachers who are admitted after a competitive examination. The majority of members of the governing body of the normal school are nominated by the Rector with a view to ensuring governmental control.

The District Council for primary education consists of *ex-officio* members (*Prefet*, Academy Inspector, Director and Directress of the two Normal schools), two Primary Inspectors nominated by the Minister, representatives of the General Council and teaching staff of the primary schools ; representatives of private schools have also seats in the Council, but they take part only in the deliberations affecting their own schools. This Council issues instructions on the lines decided by the Higher Council of Public Instruction regarding the general management and pedagogic organisation in different types of primary schools. It can interfere with the teaching and is empowered to see how far the official programme and methods of teaching are being carried out by teachers. It makes arrangements for medical inspection of school children. It determines the number of schools and the nature of school buildings to be provided, and fixes the number of teachers in each school ; but since the State pays salaries to the schoolmasters their decision on the latter point is not final, it must be ratified by the Minister.

But in reality, for all practical purposes, the Academy Inspector is at the head of all secondary and primary schools. He directs secondary education taking his authority from the Rector, and with regard to primary schools he receives instructions from the Minister through Inspectors-General and the Director of Primary Education. Thus he is absolutely independent of the Rector so far as primary education is concerned, and is nominally under the *Prefet* and the Councils where his voice always predominates.

The Inspector of Academy appoints teachers in primary schools first as probationers, and then recommends their permanent appointment to the *Prefet*. He is assisted in the administration of primary schools by the local inspectorate, Inspectors and Inspectresses for primary schools and Inspectresses for nursery schools. As a rule, there is one Inspector for each *arrondissement*. These Inspectors and Inspectresses, though placed under the direct authority of the Academy Inspector, may receive instructions from the Minister. They inspect primary schools, both public and private, help heads of schools in the grouping of children in different classes, approve the time-table, report on newly-constructed school buildings, advise on the procedure for opening and closing of schools, the establishment of private schools, the organization of school funds and adult courses. The Academy Inspector compiles his annual report on the progress of primary education from the reports submitted to him by the District Inspectors and Inspectresses on all important matters affecting primary education, as for example, efficiency of individual teachers, general activities of individual schools, and teachers' conferences, and decisions of text-book, examination and school attendance committees.

For administration of technical education, there is a separate committee, in the central office in each *département* consisting of three types of members—*ex-officio* members, *Prefet*, Academy Inspectors, Inspectors for technical education, members nominated by the *Prefet*, and representatives of the General Council and teaching staff, and of federations of employers and employees. This committee advises on the procedure for opening of State technical schools, and determines the amount payble as subsidies to private technical schools. Each *département* is to provide and maintain industrial schools either directly or paying subsidies to Municipal Councils. The State provides salaries of all the qualified teachers and pays other recurring and non-recurring expenses up to 50% of the total cost.

For agricultural education there is also a District Council consisting of the *Prefet*, the Director of Agriculture, the Conservator of Waterways and Forests, and other agricultural experts.

The Municipal or *Communal* Council consists only of elected members, and is charged with certain powers in educational administration. The Mayor who is the chairman of the council, though nominated by the elected members, is responsible to the *Prefet* and to the central authority. In the field of secondary education the

communes are partly responsible for boys' secondary schools known as *collèges*, and for girls' secondary schools of all types. The management of boarders in such secondary schools is entirely in the hands of the Mayor. The *communes* provide the sites and buildings for *collèges* and *secondary courses*, and sanction annual recurring expenses for their maintenance. In the field of higher primary education the *communes* provide sites and buildings, and installations for new schools. They receive a subsidy up to 50% of the total cost from the State. In the field of primary education they provide the sites and buildings for primary schools. For educational administration the Mayor is assisted by a school board consisting of delegates from *cantons* nominated by the Academy Inspector, and of members representing the *communal* council. The school boards have very little real power in the administration. Their decisions may be overridden by the district councils for education and by the *Prefets*, who have the right to force *communes* to close existing schools, to open new ones, to set aside the selected site and to provide new buildings. The functions of the school boards are mainly to provide school buildings and to encourage school attendance A ministerial order limited their functions in the following terms: "It is not within your province to burden yourselves with the subjects of instruction, with the criticism of methods, books or equipment."

The central authority controls every phase of education ignoring completely local dialects, languages, customs and tradition. The local educational authorities have certain financial obligations, but no real voice in the administration of educational institutions. They may have certain powers which they cannot excercise independent of the Minister. There has been a movement in France to introduce decentralization in educational administration by giving wider powers to local authorities and greater freedom to the teachers.

VOLTAIRIANISM

ASUTOSH CHATTERJEE, M.A.

ANY one who wants to familiarise himself with the ideas at the back of any revolution—political, social or religious—has to go to school, as a matter of necessity, with these two great French protagonists, Voltaire and Rousseau. Voltaire made a most fierce onslaught on religion, rent into tatters men's superstitious beliefs, and laid the greatest stress on justice and toleration in man's dealings with man. Religion itself has been made the cloak of, by the base and the self-seeking all the world over, to re-inforce their sense of superiority, or to hide their rapacity and oppression. It is idle to affront the present Bengal Cabinet with its oft-quoted slogan "Islam in danger," for such was the history of the Christian Church in Europe also, when sect warred against sect, and when abuses, tortures and blackmail became easy to practise under the cover of a zeal for religion.

We do not propose to enumerate here the innumerable writings which Voltaire's facile pen produced every day—an enormous production, astonishingly variegated, in which is mixed up the good with the mediocre. These are his tragedies *Tancred* (1760), *Olympya* (1762), *Julius Caesar* (1764), *The Scythians* (1767), *The Guebres* (1769), etc.; his satires in verse with a spirit and a verve that look like these of one possessed by the devil, *The Poor Devil* (1760), *The Russian in Paris*; epistles with a grace and good sense that seem to be winged, to *Mme. Denis* (1761), to *Boileau* (1769), to *Horace* (1772); little poetical pieces, stanzas, couplets, stories in verse, epigrams, historical works, *History of Charles XII* (1732), *Century of Louis XIV* (1752), *History of the Russian Empire under Peter the Great* (1759), *Summary of the Century of Louis XV* (1769); philosophical romances with an irony less bitter and corrosive than in his verse, *Candide, the Guileless* (1767), *The Man of Forty Crowns* (1768), *The Princess of Babylon* (1768), *Jeannot and Colin* (1764), the *History of Jenni* (1775); works on literary criticism, the *Commentary on Corneille* (1764); works on religious polemics, the *Sermon of the Fifty, Life and Extracts from the Thoughts of J. Meslier* (1762), *The Ignorant Philosopher* (1766), the *Dinner of the Count of Boulainvilliers* (1767), *History*

of the Foundation of Christianity (1777), to which we should add the innumerable pamphlets and brochures from four to twenty pages, which stream in a never-ending sequence from the "factory at Ferney"; philosophical works, of which some are of the first rank, the *Philosophical Dictionary* (1764), *The A. B. C.* (1769), *We should take a part or the Principle of Action* (1772), which, according to Condorcet, "contains perhaps the strongest proofs of the existence of a Supreme Being which it has been possible for man to bring together"; works on humanitarian propaganda, *History of Elizabeth Canning and the Calases* (1762), *The Treatise on Toleration* (1763), *The Account of the Death of the Knight of La Barre* (1765), *Commentary on the Book of Crimes and Punishments* (1766), *The Voice of the Curata* (1772), *The Cry of Innocent Blood* (1775), *The Fragments on India* (1773), etc.; all these and more, without prejudice to his *Letters* which form by itself a most considerable volume of work. Voltaire had to write or dictate up to thirty letters a day; we have of these more than ten thousand, which, however, do not represent all that he had written, and which, by reason of the variety of the ideas which they embody, the vivacity of his ever-new impressions and the exquisite naturalness of their style, form perhaps the most perfect masterpiece that he has left written.

It would be useless to speak separately of each of these works. At the bottom, during at least the last twenty years of his life, it is always the same work that appears under a hundred different forms. One might say that the patriarch of Ferney had twaddled a little. In him the man of letters was eclipsed by the philosopher. All his writings, directly or indirectly, bear on the philosophical propaganda which was henceforth the great business of his life. Tragedies, stories, pamphlets, dialogues, romances, satires, under various forms and adjustments, expound and defend against the spirit of authority, of monarchic or religious tradition, the same positive rationalism, the same natural morality.

The philosophy of Voltaire is at bottom a spirit of incredulity. There is not a single one in his writings during this period of maturity where the priests are not railed at or mocked for their superstitions, where the religious or philosophic dogmas of all times and places are not ridiculed, sometimes with irony and sometimes with indignation, and where the sectarian crimes are not relentlessly brought to book. No writer has done more than he to ruin the authority of all positive religions. Moses, David, St. Peter, the Doctrine of Trinity have all

been analysed and covered with ridicule and the character of the Jewish Jehovah has been irrecoverably blackened as that of a mad and immoral egoist.[1] Their vices, to his eyes, are first of all to be irrational. All religions are so; but, of them all, it is Catholicism which requires of reason the greatest sacrifices.[2] It is also against Catholicism that he had always directed his blows. All his polemics, from this point of view, proceed from two principles. First, Christianity is a natural and human phenomenon, which should be studied by a purely scientific and rationalistic method which we apply to the study of other historical facts—in this way anticipating sociology. We should examine the writings of the saints with eyes of reason, discuss their authenticity, their dates, eliminate the part of ignorance, credulity and superstition, on the part of their authors, we should read their numbers, in a word, and collect, in the midst of so many errors and contemptible absurdities, the parcels of reason and truth that meet our eyes. Secondly, Christianity is not a privileged religion, to the eyes of the philosopher: it is a variety, a specimen, more lively, if you will, more complete, but, not in its nature, other than any other religion. To explain it, we should compare it with other specimens. If one would take the pains to see, one would find that the Theologies and rites of the Egyptian and Greek religions would explain those of Christianity. And we should fully avow that Voltaire had plied, without much delicacy and without much industry, and with more of narrow common sense than fine critical acumen, the instruments which he had forged.

As much as the absurdity of all positive religions, Voltaire denounces their intolerance and, if truth were told, their immorality. He pursues with his indignation the crimes engendered by fanaticism, the religious persecutions, the inquisitions, the St.-Bartholomew massacres, the murder of Henry IV, etc. He revenges the anathemas and the calumnies with which the Christian apologists had charged the master of ancient wisdom, and, in the ideal Pantheon which he had erected to the mild and tolerant philosophers, "who had lighted and consoled the earth," he places, in front of Jesus, Pythagoras, Socrates, Anotonius, Marcus Aurelius and Julian. We should listen to his words of toleration and peace, to his admiration and thankfulness for the wisdom and the goodness of all good and wise men, whatever epoch

[1] *Vide* his "*Questions à Zapata*, *Epistle aux Romans*, and *Sermon of the Fifty*.

[2] The *Apologia Pro Vita Sua* by Cardinal Newman is an apologia from the point of view of faith—blind and unquestioned—to which he submits to get away from the storms of discussion and unbelief.

or sect they might belong to, and we have in him a powerful precursor to Ernest Renan himself.

This detractor of Christianity knew how to do justice to the virtues of the Christians. This incredulous man, given to persiflage and buffoonery, is inclined to a respectful and sincere attitude before the figure of Jesus and has applauded in passionate accents his doctrine of peace and love. More than this—this fiery rationalist has energetically refused to confound religion with superstition, and, in combating the latter, he believes that he was doing some service to the former. "Religion has produced millions of crimes. Superstition is a snake that holds religion in its coils; we should smash its head without hurting what it poisons." And elsewhere, in a letter, he reproaches Lord Bolingbroke by saying that "he had wished to cut up by the roots a tree which he could have rendered very useful by lopping off its branches and clearing its mosses." But when one has said all this, it remains to notice that the violence of his attacks, the narrowness of his criticism, the baseness of certain of his pleasantries, and, above all, his profound intelligence of whatever might produce a mystical sentiment in the soul enfeebled the range of his anti-Christian polemic, and, to our sight, which is more detached and clairvoyant, discredited it.

To these positive religions "capable of all the crimes in the name of the Lord," Voltaire opposes the religion of nature, a deism "without dispute and without bigotry." This deism, at the same time metaphysical and moral, though it is not a very original and profound philosophical conception, does not merit perhaps all the contempt which they affect to heap upon it. They accuse it of not being a self-consistent system. It is quite true that Voltaire, gifted with an intelligence that was the most supple, rapid and passionate that had ever been, was incapable of confining himself within the limits of his own ideas, of patiently circumscribing them and adjusting them. It is also true that, defying all systems, and all presumptuous affirmations, and convinced that the "limits of our intelligence are at the tip of our nose" (*Philosophical Dictionary*, Vol. XXVII of Bouchot's edition, p. 403), he has preferred a wise and prudent positivism, and a sort of agnosticism to hazardous metaphysical speculations. Nevertheless, in the midst of what has unjustly been called a "chaos of clear ideas"[1] it is easy to discern some great lines of metaphysics and of a neat and visible ethics beneath the continual mobility of his gushing ideas.

[1] Emile Faguet, *Etudes Litteraires de, XXVIII, Siecle*, p. 219.

The metaphysics of Voltaire lies almost entirely in the affirmation of the existence of God. In considering the universe, we see that "everything is in movement, everything acts and re-acts." "Some constant and uniform laws" govern this movement. "There is then a unique, universal and powerful intelligence which acts always by these invariable laws." This idea of a God, whose wisdom has once for all ordained the world, has nothing in common with the Christian idea of Providence. What is otherwise the nature of this intelligent and superior Being, of this prime mover which animates the world's secret springs, "Voltaire does not at all bother himself to enquire into it, for verily it is there that knowledge is interdicted to our weak intelligence." The existence of God is to him an idea that is self-evident, and in every case has been so to him. It is also, if one might say so, an idea to which he strongly adhered and which, far from being, for his mind, an idea "in the air and which held to nothing—an idea which he believed to have had, and not an idea of which he took full possession," was, on the contrary, an idea of the things which had most solicited and occupied, in the strongest sense of the word, his thought. Reading all his philosophical works carefully, one would see (unlike Brunétiere) that his positivism was more due to his prudence rather than his indifference. Perhaps he owed this attitude, we admit, to his study of Locke or Bayle. The questions on God, morals and religion are "of an importance to which everything succumbs,"[2] he repeats. He is indignant with "the indolent stupidity in which most men wallow on this most important subject."[3] One can even say that the idea of God, familiar to our intelligence, is not a stranger to our heart. Certain pages of his *Philosophical Dictionary* have an accent really penetrating. Without going so far as to say, with M. E. Champion, that "Voltaire was a religious spirit, we also turn away from the judgment of G. Lanson, "that he never had the sense for religion, the sense for the mysterious or the infinite," we hold that we should render him this simple justice that in the presence of the unknown and the unknowable he had more than once strongly felt that anxiety and metaphysical emotion which are at the source of our religious sentiment.

[1] E. Faguet, *op cit.*, p. 209.
[2] *Traite de métaphysique*, Vol. XXXVII (Edition Bouchot), p. 298.
[3] *Examen important de milord Bolingbroke*, Vol. XLIII, p. 43.

This, God, "the eternal geometry of the world," whom Voltaire had so obstinately defended against the atheism of Holbach and certain encyclopaedists, is not merely a metaphysical God. Voltaire has also found in Him a moral God who rewards and punishes. That is also one of the ideas which he has attempted much to support; and the railleries and criticisms of Diderot, Holbach and Frederic II could not swerve him from it. Should we find in this obstinacy an index of a profound and sincere attachment? We do not think so. Voltaire did not believe in this God the rewarder and revenger with all the force of his intelligence: he did not, on its own account, and by an intimate conviction, embrace this idea. He simply saw in Him a useful idea, good to preach, and, therefore, good to defend. "The belief in a God, the remunerator of good actions, and punisher of the wicked, and pardoner of light sins, is the most useful belief of mankind; it is the only restraint of powerful men who insolently commit crimes towards the public; it is the only restraint of men who adroitly commit secret crimes."[1] One should catch the difference: Voltaire believed in God, the author of this world, and it was necessary that others should believe in God, the justicer. It is in this sense that one should understand the famous verse, so often wrongly interpreted—

"If God did not exist, we had better invent one."

Voltaire has often been reproached for this conception of God as the "policeman." They have wished to see in it nothing but a "form for his timidity," a "suggestion of the terror," of an egoistical bourgeois. It would have at the same time been just to find in it a "suggestion" of his pity for the feeble and the persecuted, of his horrors for injustice and oppression, if he always presents to us this faith in a future justice as the only "resource that remains to us against the violence and the persecution of the powerful, as the only check capable of "restraining the Neroes, the Alexander VI's and the secret scrolls."[2] Why should we not find in these beautiful verses the real depth of his thoughts?—

"Kings, if you oppress me, if your might disdains
The tears of the innocent, which you cause to flow,
My avenger is in heaven, learn you to tremble."[3]

1 *Histoire de Jenni*, Vol. XXXIV, p 419.
2 *Dictionnaire philosophique*. sur Nécessité de croira a un être suprême.
3 *Epitre a l'auteur des trois imposteurs*, Vol. XIII, p. 265.

What might be easily proved is that this idea of a revengeful God was not in him a profound belief; that he came to it, while he was reasoning philosophically and for the philosophers, and that he renounced it without difficulty. "There are other checks than the faith in hell, there are those of honour, of laws and of divinity, which no doubt will incline one to be just, whether one be in hell, or out of it."[1]

So much this idea was to him of an entirely practical order, that he did not very much care for the contradiction which it presented *vis à vis* his ideas on the nature of the soul As he had prohibited himself from making any categorical affirmations on this point, he did not hide his estrangement from spiritualism. Ceaselessly he sets up against the systems, which make the soul a different substance from the body, an entelechy. Why should it not be a simple "property given to our organs," which perishes at the same time with them? "Why should we wish so eagerly to have one? Perhaps it is for vanity. If a peacock could speak, it would have boasted of having a soul, and would have said that it was in its tail."[2] This conception of a materialistic soul towards which he inclines and his idea of recompenses and sufferings in the life to come are evidently irreconcilable. Voltaire has not chosen between them. One might suppose that it is the second that he would willingly sacrifice.

The reason to him was that the idea of the immortality of the soul is not necessary to our morals. Now, it is the morals alone which interested Voltaire. According to him, it is not derived from a supernatural commandment; it is not inscribed in the tables of laws dictated from the heights of a mysterious Sinai. Entirely human and practical, they are founded on the rational knowledge of man and his nature. If it be a fact given to us by observation and comparison of human conduct, and of the ideas and sentiments of men, it denotes the existence of a natural law, which exists beneath local and accidental peculiarities, in all times and in all nations. For Voltaire, the variable and contradictory formulas in which the ignorance and foolishness of men have expressed themselves regarding this law of nature prove nothing against its existence and its universality, any more than the diversity of religions and rites prove anything against the existence of God:—

> "Thus Eternal God who deigns to animate us
> Has thrown into our hearts the same seeds.

[1] *Dictionnaire philosophique*, Vol. XXIX, p. 120.
[2] *Les Oerilles de comte de Chesterfield*, Vol. XXXIV, p. 435.

Heaven has made virtue, man its appearance.
He can dress it up with imposture and error ;
He cannot change it ; his judge is in his heart." [1]

And further: "The more I have seen men made different from one another by climate, manners, language, laws, culture and measure of their intelligence, the more I have observed morality at the bottom of them all. [2] What is then this law of nature ? It is thus summarised : "Never do unto others what you would not wish they should do unto you."

The formula appears to us to be somewhat negatively put. We should like it to have been: "Do unto others what you would wish they would do unto you." But the commentary which Voltaire has made upon his thought does not leave any one in doubt. His ethics, if it is founded on the idea of justice, is completed and crowned by his idea of humanity. First of all let us be just : the idea of justice is one of those "verities of the first rank" independent of all laws, of all pacts, of all religions, to which the entire universe gives its assent." [3] Then let us be tolerant ; we have not received "a heart to hate ourselves and hands to throttle ourselves." Would to God that the little shades which distinguish the atoms called men do not become signals of hatred and persecution ! [4] At last and above all, let us be human ; let us help ourselves "mutually to carry the load of a painful and transient life." [5] Let us be "compassionate towards the animals" and "charitable to men." Without humanity, a virtue which comprehends all virtues," [6] one does not deserve the name of man. All the ethics of Voltaire is expressed in three words—justice, toleration and humanity. We are still far off from realising them, though we are free to disdain his ethics as coming from the hands of an "irreligious" man.

And, after this, it would not affect him very much if Voltaire has been, as people have, with great persistence, reproached him with being [7] "insolently aristocratic and monarchistic." It

1 *Poème sur la loi naturelle*, Ière partie.
2 *Le Philosophie ignorant*, Vol. XLII, p. 583.
3 *Ibid*, Vol. XLII, p. 583.
4 *Traite sur la tolerance*, Chapitre XXIII.
5 *Ibid.*
6 *Elements de la philosophie de Newton*, Vol. XXXVIII, p. 42.
7 Brunetiere, *Etudes critiques*, Ière serie, p. 734.

would be easy to prove, text in hand, how much this summary judgment neglects the *nuances*.[1] What is certain is that Voltiare's social philosophy is entirely penetrated with justice and humanity. He has detested and attacked all oppressive institutions, all iniquitous traditions, light for the great, but heavy for the small, the venality in the functions of magistracy, the diversity of the laws, the tortures, the Gothic cruelty of criminal justice, the secrecy in judicial procedure, the privileges in the matter of imposts, the feudal rights, etc., etc.

And we know sufficiently well that he is most limited, on this point, to a merely theoretical affirmation. During the last twenty years of his life, he was a man of action—he lived his philosophy. Without doubt one should regret that Voltaire adopted very late, and as if pushed by his intellectual honesty, this career of beneficent activity. Would it be just, however, to admire him less for it ? Full of years and glory, rich, independent at the hour of repose, he takes pity on the lowly, the feeble, those who are tormented and persecuted. He thinks of using in their favour his strength of opinion, his relations, his wealth. He expands around himself his activity, his prosperity, his diligence. The little village of Ferney was nothing, when he came to live in it, but a miserable hamlet where fifty inhabitants were vegetating. Voltaire had healthy houses built in it, created a factory and some workshops and model farms, and attracted many workmen ; the village was peopled and enriched ; and one could count two hundred inhabitants when Voltaire died. His neighbours, the peasants dependent on the Abbey of Saint-Cloud were crushed by the rights of mortmain (inalienable property like *Debutter*) which the monks of the Abbey exercised with harshness. Voltaire supported their proceedings against the Abbey and declared his opinion in favour of the abolition of their serfage.[2] His proceedings were unsuccessful, but he took advantage of the accession of Turgot to his ministerial office, in saving the little land of Gex from the tyranny of the farms. When the great Edicts of 1776 appeared, carrying with them the abolition of the *corvées* (taxes on grains) and the liberty of trade in grains, Voltaire applauded

[1] Voltaire has always spoken with great admiration of the republican government as the most perfect of *all*. Under this question, see the texts collected in E. Champion's *Voltaire etudes critiques*, p. 250 *et seq*. See also Voltaire's *A. B C*.

[2] *Le Voix d'un curé*.

them, and upheld the minister against his enemies with all his popularity and with all his reputation. He heard that a grand-niece of the great Corneille (the famous tragedian) had come to Paris in her distress. In all haste he made her come to Ferney, adopted her, placed her under tutors, endowed her with the income of his *Commentary on Corneille*, married her to a cornet of the dragoons, and watched over his young charge under his roof.

But it was nothing, so to say, except the small change, an inessential fraction, of his benefactions; more splendid acts of his humanitarianism soon manifested themselves. In 1762, a Protestant merchant of Toulouse, Calas, whose son, recently converted to Catholicism, had hanged himself, was accused by public rumours of having assassinated him out of hatred for his conversion. The judges, blinded by religious passions, and prevailed over by the clamour of an indignant fanatical populace, condemned him to be broken on the wheel. This iniquitous sentence was executed. The widow and her sons, being panic-stricken, fled. Voltaire heard of this affair, brought the fugitives to him, and gained the conviction that Calas had fallen a victim to a monstrous judicial error. He denounced this iniquity, published a *Recuil de pieces originales* (1762) [1] and a *Traite sur la tolerance* (1763) [2] and, carried off by the emotion which his hot complaints produced through public opinion, obtained the revision of the judgments and the re-instatement of Calas.[3]

In 1765, a new affair, closely analogous to the first, happened. A. Castres, a poor girl, being over-excited for being about to be placed in a nunnery, committed suicide; her father, the Protestant Sirven, was charged with murdering her to prevent her from embracing Catholicism. More happy than Calas, Sirven fled. He went to Switzerland and took refuge with Voltaire, who took up his cause, and, with the help of the advocate, Elis de Beaumont, came to prove his innocence and had him acquitted.—Another instance: In 1766, a young man of twenty-eight, the Chevalier (knight) of la Barre, was beheaded in Arras for refusing to uncover his head when a religious procession was passing. Voltaire, beside himself with horror, protested against such a cruelty, and provoked by his

[1] *i.e., Collection of Original Accounts.*
[2] *i.e., A Treatise on Toleration.*
[3] *Histoire d'Elisabeth Cauning et des Calas.*

writings (*Cri du sang innocent, Relation de la mort du chevalier de la Barre*) [1] a movement of public opinion against the penalty of death.—In 1766, his *Commentaire du Traite des delits et des peines* [2] prepared the ground for the revision of the code of criminal laws. He conducted a compaign against the *parlement* which ended in the *coup d'etat* (stroke of policy) of Maupeau (1771). He again intervened in the proceedings against Martin, Montbailli and Morangies. At last, at the age of eighty, he undertook the rehabilitation of the memory of Lally-Tollendal (Count de Lally), unjustly condemned for the faults of his predecessors in India; his last joy was to learn of this restoration. "There are many things over which my heart bleeds. I am to some extent the Don Quixote of the miserable." [3]

After this, if one should like to see in all these acts of generosity and beneficence an almost feverish activity on his part, in which his care had been to keep his popularity always on the alert, one may do so. One might then only wish, since his love of fame and his need of action always took these forms, that there were fewer cases of ingratitude, and little more of partiality, towards him. It would be simpler and more just to recognise that what, in the last part of his life, animated Voitaire, long before the allegation of these interested motives which people enumerate with so much complacency, was a noble motive: an idea, a will and a passion to ameliorate the lots of men. It is a fruit of Voltairianism so often condemned—a fruit so precious that one should hesitate to condemn the tree. If there is, in France, and for the matter of that, in Europe, a little more of justice, of toleration in manners and customs, a little more of softness in public intelligence, they undoubtedly owe it in a great measure to Voltaire.[4]

[1] *i.e., Cry of Innnocent Blood, An Account of the Death of Chevalier de la Barre.*
[2] *i.e., Commentary on the Treatise on Crimes and Punishment.*
[3] *Lettre à Richelieu*, 18th September, 1769, Vol. LXVI, p. 26.
[4] Notice this tone of "damning with faint praise" on the part of a great French critic: "By his indecencies, his taunts, his calumnies, his intelligence, Voltaire has given to us our liberty, and prepared the ground for our justice." See G. Lanson's *Histoire de la litterature Francaise*, p. 772.

News and Views

[A monthly record of News and Views relating to Cultural and Academic Institutions, Events and Movements in India and Abroad.]

P. E. N. Congress

On the invitation of the Swedish Centre, the 1939 International Congress of the P. E. N., a world Association of poets, playwrights, editors, essayists and novelists, will meet in Stockholm from September 4 to 7.

It is expected that 300 authors will attend. Mr. H. G. Wells, the former International President of the P. E. N., Miss Storm Jameson, President of the English Centre, and Mr. Hermon Ould, International Secretary-General, P. E. N., have been invited from England, and among other prominent writers who, it is hoped, will be present, are Herr Thomas Mann, M. Romain Rolland, M. Paul Vallery and Signor Benedetto Croce.

A welcome reception at the National Museum, Stockholm, on September 3, will precede the formal opening of the Congress which will take place on the following day at the City Hall. At the formal session subjects of universal interest will be discussed.

New " Hindustani " Style

Mr. Nepal Singh, Assistant Director of Public Instruction and Secretary of the Hindustani Academy Inquiry Committee, Allahabad, had issued a questionnaire to 138 prominent gentlemen residing in the United Provinces and outside, inviting their opinion whether it is desirable and practicable to create and develop a separate style for Hindustani, or to let it continue to countenance the free and copious use of the classical material from Sanskrit and Persian as now.

From an examination of the publications of the Academy the Inquiry Committee has found that it has not been easy for the authors to keep to the ideal of the Hindustani style.

Bengal Government State Scholarship

Miss Razia Sultana Ahmad, M.A., a distinguished scholar of Calcutta University, has been awarded a State Scholarship of £335 per annum by the Government of Bengal for three years for higher studies abroad. Miss Ahmad, who is a daughter of Khan Bahadur Badrud-Din Ahmad, First Assistant Registrar, Calcutta High Court, has had a brilliant University career, standing first with First Class Honours in B.A. and topping the list in the First Class in the M.A. Examination in Persian. Along with Western education Miss Ahmad has received a sound religious education, having studied Islamic theology. She will shortly sail for England where she intends joining the Cambridge University.

Royal Empire Society's Gold Medal

The Royal Empire Society's gold medal has been awarded this year for " An African Survey," by Lord Hailey. The medal is awarded for a book

or books written in recent years on economics, history, politics, or science, or for meritorious services to the Empire, which, in the opinion of the award committee, have contributed to the objects of the Society as defined in its Royal Charters of Incorporation.

Hostel for College Girls

The Chhatri Niketan (hostel for college girls), which has been established at P261, Rash Behari Avenue, under the auspices of the Hostel Committee of the Calcutta branch of the All-India Women's Conference, was opened by Mrs. P. K. Roy in the presence of a distinguished gathering of ladies.

The hostel is situated in a healthy and convenient quarter of the city. At present it has accommodation for about 20 students. Arrangements will be made for games, cultural activities, recreation and social service. The staff consists of a Lady Superintendent, a matron and an honorary supervisor. Besides, the members of the Hostel Committee will pay occasional visits of inspection.

" Stone Age " Men

A Reuter message from Java states:—

The discovery of a huge tribe of " stone age " men is reported here by a Netherlands American expedition that has just returned from a full year of exploration in the depths of Dutch New Guinea.

Characterised as one of the most interesting ethnological finds of recent years, this tribe is said to number about 60,000 individuals, and not one of its members is stated ever to have laid eyes on a white man before the arrival of the exploring party.

The explorers say that the tribesmen were found using only stone implements and spoke an unknown language. They wore almost no clothing at all, and looked upon the eating of their enemies as a justifiable reward for victory in warfare carried on with the neighbouring Papuans. On the other hand, they were not unfriendly towards the explorers and willingly sold sweet potatoes and pigs in return for shells.

The expedition was organised purely for biological research and succeeded in making a remarkable collection of birds and mammals previously unknown to science. The characteristics displayed by these specimens are said clearly to indicate the close relationship between New Guinea and the continent of Australia.

Dr. Montessori's Visit—Training Course at Adyar

The organisers of the First Indian Training Course in Education to be conducted by Dr. Maria Montessori, M.D., D.Litt., write:—

Registration for participation in the First Indian Training Course in Education to be conducted by Dr. Maria Montessori in October is now very heavy. May we ask applicants for the prospectus to send stamps for six pies if they want only the prospectus and for two annas if they want a letter of information with it ?

Dr. Montessori will be leaving Europe in the "Strathallan" on October 7, arriving in India about October 19, and at Adyar on October 22, but the dates are a little uncertain.

Enthusiasm and support for the visit of Dr. Montessori among the leaders and educationists of this country is very warm. Mr. Gandhi has written: "I had the privilege of meeting Dr. Montessori in London. I have no doubt that her coming to India cannot but be beneficial. I am glad you have been able to induce her to consent to give India six months." In consenting to be a Patron of the Course, Pandit Jawaharlal Nehru says: "I shall gladly do what I can to help her during her visit here."

Many other great leaders of thought have welcomed the opportunity to support Dr. Montessori by becoming Patrons of this her First Indian Training Course. They include H. H. the Maharaja of Bikaner, Dr. Rabindranath Tagore, Mrs. Sarojini Naidu, Sir Mirza Ismail, Dewan of Mysore, Sir Akbar Hydari, Dewan of Hyderabad, Sir C. P. Ramaswami Aiyar, Dewan of Travancore, Sir Annamalai Chettiar, Dewan Bahadur S. E. Runganadhan, Vice-Chancellor of the Madras University, Srimati Rukmini Devi, Mr. C. Jinarajadasa, Dr. J. Cousins, Rev. C. F. Andrews, Mr. Jamshed Nusserwanji, Mr. K. Venkataswami Naidu, Mayor of Madras, and others. Passages from the letters of these friends speak of "their delight that Dr. Montessori will soon be in India," that they "warmly welcome the event" and feel that "it provides an unrivalled opportunity to come into contact with a great educational genius" and hope that "our teachers and workers with children will avail themselves of it."

Departments of Education in several provinces are deputing teachers to attend the Training Course.

After her three months' course at Adyar, Dr. Montessori will make a short tour of India, and it is hoped that she will lecture before Universities and other learned bodies before she has to leave India to fulfil engagements in Europe in March. Details of her tour are not yet worked out. Further information as to the course may be obtained from Mr. K. Sankara Menon, M.A., Hon. Secretary, Montessori Training Course, Olcott Gardens, Adyar, Madras.

Miscellany

RURAL FAMILIES ON RELIEF IN AMERICA

Rural families in the United States were subjected to a number of unusual forces during the period 1930-35 which resulted in severe economic distress in all sections. Some regions suffered directly from only one force or received the diffuse effects of several. In other regions the full brunt of various forces focused on the area and resulted in the almost complete collapse of normal economic and social activities.

While rural distress was caused in considerable part by long-range factors, the effects of the business depression were nevertheless of great importance in the rural relief situation. The drop in the price of farm commodities, because of cyclical fluctuations in the money market, was only one factor in this situation as it affected the farmer and the village dweller. Included also were price movements resulting from the weather and from crop conditions in foreign countries and the long-time trend in agricultural production and exportation. Thus, all of the agricultural price movements resulted in a decline in prices and sales. This included both the drop in value and quantity of exporteds good and the change in the urban market with the depression.

Another force bearing on the rural population and helping to determine relief needs, which can also be identified with the business depression, was the change in non-agricultural work opportunities which accompanied the decline in the industry and commerce. This affected primarily the large numbers of part-time farmers who live in densely settled and relatively urbanized areas. These families were forced to a more complete dependence on the soil and to a more self-sufficient type of farm economy.

Partly connected with the business depression and partly dependent upon a long-time trend has been the decline in the utilization of natural resources. Activity in isolated coal and iron mining areas has decreased or stopped entirely and the lumber industry has been sharply curtailed. These are typical examples of industries which give employment to rural families either on a part-time or full-time basis. In some areas the depression coincided approximately with the exhaustion of natural resources so that the shut-down has been permanent rather than temporary. For the most part rural families suffering under the pressure of these forces are located in mountain and wooded areas.

A factor which was not connected with the business depression was the drought. Short-time cyclical movements of rainfall and dry weather have not been unusual on the plains of the great West, but in 1934 and 1936 were droughts which have been unequalled for both extensity and severity during this generation. The most extreme effects of the drought were found in a belt running north and south through the two Wheat Areas and bordering both the Corn Belt and Western Cotton Areas, but minor effects of the drought were found in almost every section of the country.

Agricultural occupations accounted for about the same proportion of the heads of rural relief families in June, 1935 as did the non-agricultural occupations, 40·6 per cent. as compared with 41·2 per cent. Considering

that relief represented only one of four public measures to assist agriculture, it is disheartening that so many farm families had to have this form of assistance. The proportion of agriculturists among the heads of rural relief families varied from more than two out of three in the Spring Wheat Area to one out of eight in New England.

Among the agriculturalists there were two and one-half times as many farm operator as farm labourer families on relief. This is not surprising since there are considerably more than twice as many farm operators as hired farm labourers in the United States. Within the farm operator group, however, tenant families constituted a greater proportion of the relief cases than did farm owner families although the country as a whole contains about three farm owners for every two tenants.

Unskilled labourers accounted for by far the largest proportion of heads of non-agricultural families. In New England there were also a large number of relief families whose heads were skilled and semi-skilled workers.

Families whose heads were non-workers accounted for 15·6 per cent. of all relief cases, reflecting the tendency for relief rolls to include a large number of families that for various reasons contain no bread-winner. In 2·5 per cent. of the cases the head of the family had no usual occupation. —C. C. Zimmerman and N. L. Whetten (U. S. Government Printing Office, Washington, 1938).

BENOY KUMAR SARKAR

THE ANGLO-ROUMANIAN AGREEMENT

A successful issue to the trade discussions between the Roumanian Government and the British Commercial Mission visiting Bucharest under the leadership of Sir Frederick Leith-Ross was announced by the President of the Board of Trade in the House of Commons on the 11th May. The Protocol signed on that day on behalf of the British and Roumanian Governments embodies various measures designed to promote trade between the two countries, primarily through normal commercial channels.

Various measures are to be taken in order to maintain and stimulate the flow of exports from Roumania to the United Kingdom. The Government of the former country is to encourage by various means an increase in the production and export of oil and also, by the use of modern refining machinery, an improvement in its quality. They propose to accord to oil companies in which there is a substantial British financial interest most-favoured-nation treatment in the giving of permits for exploration and exploitation of new lands and in all matters concerned with the grant and operation of concessions and with the production of oil. In addition, the British Government will be prepared to purchase for Government stocks up to 200,000 tons of Roumanian wheat from the next harvest if available at world prices, while the Roumanian Government will take action to simplify the machinery of export control so as to facilitate the export of timber to the United Kingdom. Furthermore, British assistance is to be given in securing expert advice in connection with Roumanian export goods as to the best methods of meeting the requirements of the United Kingdom market.

It is recognized, however, that one of the main objects in developing Roumanian exports to the United Kingdom is to secure an increase in Roumanian purchases of British goods which in certain cases are hampered

by existing exchange conditions. It is stated that in order to ensure that trade between the two countries shall be conducted on a sound economic basis, the rates of exchange between the leu and sterling should be such as to attract exports to the United Kingdom from Roumania without making the cost of United Kingdom goods too high for the Roumanian market. As a step towards the attainment of a freer system, alterations are proposed in the provisions and working of the Anglo-Roumanian Payments Agreement of 2nd September, 1938, including arrangements to avoid the wide fluctuations in the rates at which sterling has been dealt in and which have tended to create difficulties for trade. If these arrangements fail to have the desired effect, changes may be made by consultation in the existing agreement for allocating to particular purposes specified percentages of the sterling resulting from Roumanian exports to the United Kingdom. In addition, the Roumanian Authorities will establish a market for forward exchange dealing in the sterling allocated to the Anglo-Roumanian Clearing Office and held in the United Kingdom Goods and General United Kingdom Accounts.

Other proposals for the development of mutual trade of the two countries include the setting up of trading organisations; the granting of free zones in Roumanian ports, consultation on questions of import or export restrictions, and an examination of the possibility of establishing direct air and shipping services between the United Kingdom and Roumania. A provision of special importance is that any privileges or concessions agreed to for the development of trade between Roumania and other countries shall be available to United Kingdom interests trading in Roumania.

The British Government have agreed to provide guarantees up to a total of £5 million through the Export Credits Guarantee Department in connection with purchases for export to Roumania by the Government of that State of goods manufactured in the United Kingdom and also with other approved expenditure by the Roumanian Government in this country. The arrangement will take the form of a guarantee of sterling Notes issued by the Roumanian Government up to a total sufficient to meet the expenditure. The Notes are to bear interest at 5 per cent. per annum, and their maturities are to be arranged so that the capital and interest will be repaid by equal annuities over a period of twenty years.—*Barclay's Bank Monthly Review* (London) for June, 1939.

BENOY KUMAR SARKAR

COTTON'S SYNTHETIC RIVALS

Cotton farmers and the cotton trade are studying with apprehension the comparatively high rate of growth in synthetic fibre production and use. The publicity accompanying developments in the synthetic fibre field and the novelty of producing wearing apparel from such materials as wood, coal, and skim milk have created much interest and some confusion about the nature and importance of synthetic textiles. For this and other reasons, it seems timely to state briefly the synthetic fibre situation, giving particular attention to its relationship to the use of cotton, says C. H. Robinson in the *Agricultural Situation* (Washington, D. C.) for April, 1939.

Rayon is the leading synthetic fibre used in the textile production. World production of rayon is equivalent roughly to one-sixth of the world

output of raw cotton. Rayon is used principally for clothing, especially dress fabrics. But it is used to some extent also in household articles such as bed-spreads and curtains, and to a limited degree in industrial materials.

Rayon is made from cellulose obtained commercially, principally and almost exclusively from wood pulp and cotton linters. No raw cotton is used as a source of industrial cellulose, not because cotton is not physically suited to the purpose but because it is too costly relative to wood pulp and cotton linters. Experiments of various kinds are under way here and abroad to use other plant materials as a source of cellulose but the commercial use of these materials is limited.

Rayon used in most textiles is either continuous filament yarn or staple fibre. Filament yarn is manufactured into a continuous thread at the rayon factory and is sold for use in weaving or knitting by textile manufacturers. Staple fibre rayon is produced from the same raw materials and by practically the same process as filament yarns, except that the filaments are not continuous but cut to definite lengths for spinning on cotton, wool or silk spinning systems. Staple fibre rayon may be spun alone or in mixtures with other fibres.

World rayon production increased during the post-war period from a total of only 33 million pounds (equivalent roughly to 80,000 bales of cotton) in 1920 to 1,900 millions (equivalent to something like 4,500,000 bales) in 1938. It is difficult to determine accurately the effect of the development and use of rayon upon the use of other textile fibres. It is fairly obvious, however, that fibres used for clothing have been affected most since it is in this group of materials that rayon has been most extensively used.

The principal clothing fibres other than rayon are cotton, wool and silk. These are also the fibres used commonly for household purposes. Cotton is used in much larger quantities than all other fibres combined for clothing and household purposes and it seems probable that rayon has been substituted for cotton more extensively than for any other fibre and possibly rayon has displaced more cotton than it has all other fibres combined.

Despite the inroads of rayon into such important uses for cotton as dress fabrics, underwear and hosiery, world cotton consumption increased during the post-war period from 17,150,000 bales in 1920-21 to nearly 28,000,000 in 1938. Thus, world cotton consumption has increased at an average rate of a lilttle more than half a million bales annually during the last two decades. This upward trend may be explained in large part by an increased world population and the expansion in the use of cotton for industrial purposes.

From 1929 to 1938, world rayon production averaged nearly 960 million pounds annually (2,400,000 bales). If it should be assumed conservatively that less than half of this quantity displaced cotton directly or indirectly, it might be argued that cotton consumption averaged about 1,000,000 bales less annually or a total of 10,000,000 bales during the past decade than if rayon had not been developed. This quantity of cotton is equivalent to almost half of the world carry-over of cotton at the beginning of the 1938 season. These comparisons, however, are useful only for illustrative purposes and should not be taken in any sense as an accurate appraisal of the effect of rayon competition upon cotton consumption.

In Germany, where rayon has been substituted for cotton, under compulsion of Governmental decrees, total cotton consumption in 1937-38

was about 1,100,000 bales against a 5-year average of slightly more than 1,300,000 bales (1929-33). German rayon production in 1937 was 345 million pounds (equivalent to 800,000 bales of cotton) against a 5-year average of only 65 millions (150,000 bales). The important question of the extent to which increased rayon production has depressed cotton consumption must be, of necessity, largely a matter of opinion, but it seems fairly obvious that considerably more cotton would have been consumed during the past few years had there been no significant increase in the use of rayon. This is certainly so, if it is assumed that total textile consumption would have been maintained.

Germany is not the only country in which the use and mixture of rayon with cotton has been enforced by law or Governmental decree during recent years. In Japan and Italy, and possibly in a few other countries, a similar situation exists. In these countries, rayon consumption has increased more than in countries where such measures have not been enforced and where a shortage of foreign exchange and efforts toward national self-sufficiency have been less pronounced.

Great strides have been made in improving rayon quality and in reducing production costs. For example, in the United States the price of a typical quality of rayon yarn was quoted at $2·00 per pound in 1925 against about 50 cents in 1938. Viscose staple fibre rayon is currently quoted at 25 cents per pound, against less than 10 cents for Middling 1.1/16 inch cotton at Carolina mill points, but cotton contains a larger proportion of waste than staple fibre.

In a recent study of the development of synthetic fibres, by the United States Department of Agriculture, it was concluded that " some further expansion in the use of rayon during the few years is to be expected, but no such tremendous relative gains as those . . . in past are likely. Rayon is approaching industrial maturity; that is, considering its present properties, and its price relative to prices of competing fibres, it is approaching a limit of expansion into those fields for which it is suitable."

Rayon is the only synthetic fibre of much commercial significance as compared with cotton, wool silk and other important fibres. There are, however, at least three other synthetic textile materials that seem worth mentioning—lanital, glass fibre and ' Nylon.'

Lanital is generally considered a wood substitute and is made chiefly from casein obtained from skim milk. Commercial production was first begun in Italy in 1936. Reports regarding the use of this material are somewhat conflicting but some advices from Italy indicate that it has not been entirely satisfactory as a textile material.

Glass fibre is another development which so far as textiles are concerned is not commercially important but is claimed to have potentialities for use in curtains, draperies and insulating materials.

' Nylon ' is the trade name of a new textile material developed by a large rayon and chemical manufacturer in the United States. It is said to be made chiefly from materials derived from coal, water and air. ' Nylon ' is claimed to be especially adapted as a substitute for silk in ladies' hose but it is said also to be adapted for thread and other products. A large plant is now in construction to manufacture the product.

With the exception of rayon, however, synthetic textile materials have not displaced a significant quantity of cotton, whatever their potentialities may be.

BENOY KUMAR SARKAR

Reviews and Notices of Books

The Man Behind the Plough.—By Khan Bahadur Aziz-ul Huque, C. I. E.,, B.L., Speaker, Bengal Legislative Assembly, and Vice-Chancellor, Calcutta University. Published by the Book Company, Ltd. Price Rs 5. p. 386.

I do not intend to make any reference to the first-hand knowledge and long experience of the author in matters agricultural for, even if these were not referred to on the cover of the book, the most careless of readers would find evidence of these in almost every page. Nor shall I mention the very adroit way in which the enormous and almost unmanageable mass of materials available in different Government publications have been ransacked, all extraneous matter not bearing directly on the problems dealt with sifted out and relevant facts marshalled in such a way as to establish the thesis of the writer in a most convincing manner.

Even those inhabitants of Calcutta—and these are not few in number—who take pride in their ignorance of rural problems have it driven home into their minds how unsatifactory the conditions are under which 'the man behind the plough' has been living for generations and how with every generation that passes his condition is getting worse and worse till it appears almost irremediable. Here, for the first time, the data proving this state of things have been brought together in an easily accessible form. In this book we have at last a faithful and an accurate picture of the Bengal peasant, all phases of whose life are touched upon with great brevity and perfect mastery.

Only the man who has attempted to study and interpret the actual condition of the agriculturist from the badly written and worse arranged Government publications can have some idea of the herculean nature of the task. This has been done—and done very thoroughly. The author deserves the gratitude of those who have neither the time nor the inclination to go through what we call the " source " books of the agricultural economics of Bengal. It has been one of my hobbies to do this and I personally feel that a very valuable piece of work has been done—and done extremely well.

I have no desire to draw invidious distinctions. There are other books on the agricultural economics of Bengal but I have yet to come across one which deals so briefly and yet so fully with every aspect of the rural life of our province.

The author is also to be congratulated on his scientific approach to his subject, the boldness with which he has drawn his conclusions and the solutions he has suggested. As one who believes in and, in a very humble way tries to practise, Christian Socialism, these conclusions seem to err on the side of moderation, yet they are valuable as presenting what is ordinarily characterised as the sane and moderate view of our agricultural problems. His fearlessness in quoting certain facts not easily available in ordinary publications has placed much valuable material in the hands of those who know how to use it for pressing for the adoption of a more rapid pace in agricultural improvements and the introduction of what may be called a revolutionary policy in agrarian reforms.

It seems almost ungracious to offer any criticism of a work so well informed, so carefully planned and so brilliantly executed. It is suggested

that it should be provided with an index and a bibliography, the former for the man pressed for time who might like to utilise the very valuable information scattered throughout the book, and the latter for the reader who might be tempted to probe more deeply into any particular aspect of the agricultural problems of India.

A book of this type ought to be on the shelves of every political worker, every student of agricultural economics and every public man.

H. C. MOOKERJEE

The Nyaya Theory of Knowledge—A critical study of some problems of Logic and Metaphysics. By S. C. Chatterjee, M.A., PH. D. Published by the University of Calcutta. Price Rs. 5. pp. xx+421.

The great importance of Nyāya philosophy, among the systems of Indian thought, is nowadays generally recognised by competent scholars. Its special merit, which is mainly derived from its entirely objective outlook and the scientific rigour with which it treats of its subject-matter, is all the more obvious today when the philosophic world appears to be dominated by realistic modes of thinking. Unfortunately, the literature of Nyāya, especially in its later developments, is not easy to read, and so far we had no treatise in English which dealt with this important school and could be said to have done full justice to it. Books on Nyāya certainly there are, but as far as we know they never succeed in giving their reader any idea of the subtle, acute and elaborate analysis of the problem of knowledge which we find in Nyāya philosophy. Indeed, it is in the field of Theory of Knowledge, more than in any other, that the Naiyāyikas may be said to have made their lasting contributions; and even those who differ widely, in their metaphysical persuasions, from the Naiyāyikas, do not hesitate to follow their lead in epistemology. There was thus a great and obvious need of a book dealing adequately and worthily with the Nyāya Theory of Knowledge. We are, therefore, very grateful to Dr. Chatterjee for supplying this long-standing need.

His book is divided into five parts and twenty chapters. The first part is devoted to a discussion of general epistemological problems, such as the nature and forms of knowledge, the conditions and factors of valid knowledge, the test of truth and error, etc. The problem of perception, in all its aspects, is treated in the second part. Various definitions of perception and different kinds of perception are discussed; the conditions of perception, both ordinary and extraordinary, are also determined. The third part deals at length with inference and treats also of the fallacies. The fourth part deals with *upamāna* or comparison, and the last part discusses testimony and other sources of valid knowledge recognised in Indian philosophy.

On every subject the Nyāya view is faithfully presented and thoroughly discussed and is also compared with the views of other systems of Indian philosophy on the same topic. There are frequent references to parallel views of Western thinkers which are always very illuminating. The book gives everywhere ample evidence of the vast learning of the author and of his deep insight into philosophical problems. In my opinion this one book, if carefully studied, would give an excellent knowledge, not only of the Nyāya system, but of all systems of Indian thought, so far, at least, as the problem of knowledge is concerned.

The author, although always sympathetic towards the Nyāya position, has at places criticised the Nyāya view and expressed opinions which will not be acceptable to a genuine follower of Nyāya. This only testifies to the author's independent judgment and is not to be regretted inasmuch as the author's personal views, whatever their worth, have not in any way vitiated or confused his interpretation of the Nyāya position.

RASVIHARY DAS

Indian Realism.—By Jadunath Sinha, M.A., Ph.D., Professor of Philosophy, Meerut College. Kegan Paul, London. Price 10*s*. 6*d*. Pp. xvi+287.

This book is a clear and comprehensive account of the long controversy between subjective idealism and realism in Indian philosophy with regard to the existence of the external world. In it we have a fairly complete exposition of the Yogācāra position and an exhaustive statement of its criticism by the different schools of Indian realism. Both the exposition and the criticism of Yogācāra idealism are based on the original works of some of its illustrious followers and many of its eminent critics. There are frequent references to Western thinkers and their thoughts, which serve to bring out the main points of agreement and difference between the Indian and Western schools of idealism and realism, and also to make the work an interesting study in comparative philosophy.

The book is divided into eight chapters. Chapter I gives an account of Yogācāra idealism, based on the works of Mādhavācārya, Śāntarakṣita, Kamalaśīla, and Vācaspati, and compares it with the subjective idealism of Berkeley and the sensationism of Hume. The epistemological and metaphysical arguments in support of subjective idealism have been clearly explained here in all their details. Chapter II briefly explains the realism of the Sautrāntikas as compared with the representationism of Descartes and Locke, and states the Sautrāntika criticism of Yogācāra idealism from Mādhavācārya's Sarvadarśanasaṅgraha. Chapter III is an account of the Yogācāra criticism of the Sautrāntika theory of representationism as based separately on the works of Jayanta, Pārthasārathi and Śrīdhara. Chapter IV gives us the Jaina exposition and criticism of Yogācāra idealism and contrasts the direct realism of the Jaina with the indirect realism of the Sautrāntika, and summarises the Jaina criticism of Sutrāntika realism from Sarvadarśanasaṅgraha. Chapter V states the Saṅkhya-Yoga exposition and criticism of Yogācārā idealism from the works of Aniruddha, Vyāsa, Vācaspati and Vijñānabhikṣu. Chapter VI is an account of the Mīmāṁsā exposition and criticism of Yogācāra idealism from the works of Śabara, Kumārila, Pārthasārathi and Prabhākara. Chapter VII deals with the Yogācāra idealism as explained and criticised by the Nyāya-Vaiśeṣika realists like Gautama, Vātsyāyana, Udyotakara, Jayanta and Śrīdhara. Chapter VIII opens with a statement of the contrast between Śaṅkara's absolute idealism and the Yogācāra's subjective idealism, and gives an exposition and criticism of Yogācāra idealism as contained in the works of Śaṅkara Rāmānuja, Nimbārka, Madhva and other Vedāntins. In some chapters we find also a criticism of Sautrāntika realism by other realistic thinkers like Prabhākara, Śrīdhara and Rāmānuja.

It will appear from the above that the author has given in this book a very elaborate account of Yogācāra idealism from almost all the original texts dealing with this subject. His interpretation of the texts and statement of the main positions and arguments of the different realistic and

idealistic schools of Indian philosophy are, on the whole, correct and satisfactory. But the exposition and criticism of Yogācāra idealism being stated separately from different treatises, there is a good deal of repetition of the arguments for and against subjective idealism. This could have been avoided by a classified statement of the Yogācāra's main positions and arguments as well as those of his critics. The author's familiarity with Indian and Western thought has enabled him to throw much light on the controversy between realism and idealism by referring to parallel views in Indian and Western philosophy. He has, however, contented himself with pointing out the general agreements and differences between Indian and Western systems of philosophy, and has not fully developed the logical distinctions between them. But there is no doubt that his elaborate and thorough treatment of the subject, and his constant reference to original texts in support of his statements, make the work a valuable contribution to Indian philosophy. It is undoubtedly a scholarly work on which students can rely for authentic information about and accurate knowledge of one important school of Indian thought. Supplying, as it does, the Eastern parallel to the Western controversy between idealism and realism, the book will be useful not only to students of Indian philosophy but also to those of modern Western philosophy.

S C. CHATTERJEE

Sadhana or Spiritual Discipline—Its Various Forms (Expository and Critical). By Sādhu Śāntinātha, Poona, 1938. Pp. 19+157+cxxxvii+xviii.

This work is a thoroughly rational criticism of the religious life with special reference to its practical aspects and theoretic conceptions. Its main object is to show that no religion can stand rational scrutiny of its contents. On its practical side, every religion enjoins on its followers a system of culture and discipline for the attainment of the highest good of life—the *summum bonum*. On its theoretical side, it accepts, as valid, a number of beliefs and doctrines regarding utlimate realities like the absolute, God, self, etc. The first is the aspect of sādhanā, and the second is the philosophical basis of the first. By a critical examination of the first, the author seeks to show that no sādhanā can lead to objectively valid results, although it may have some subjective utility for the religious aspirant in producing a sense of serenity and satisfaction in him. Similarly, it is shown that the metaphysical realities, on which different religions pin their faith and by which they seek to explain the world of experience, are no better than misty conjectures which cannot stand the criticism of reason. It is in this spirit of destructive criticism that the author exposes the futility of various forms of sādhanā and the unsoundness of their respective metaphysical foundations. It is his honest conviction that no sādhanā stands on objectively valid grounds, nor does it lead to any objectively valid experience. Religious authorities, saints and prophets, may claim to have some kind of spiritual experience or intuition of absolute truth as the final state of their sādhanā. But this is, so thinks the author, only a case of the wish being father to the thought and constancy of thought about the desired object developing into a subjective realisation of it. So at the end of a long and arduous course of critical enquiry he offers certain suggestions for sādhanā without metaphysical assumptions, and this, he thinks, is the only possibility left to a sincere rationalist.

In order to substantiate his position, the author criticises various forms of sādhanā as follows: Buddhist sādhanā consists in moral discipline and contemplation of the truths about the nature of things, *viz.*, 'all is sorrow,' 'all is momentary,' 'all is unique,' and 'all is void.' None of these truths can be proved to be objectively valid; nor are they consistent with a moral and religious life of sādhanā to attain liberation (nirvāṇa). The self being momentary, we cannot speak of it as being liberated from a previous state of bondage. Jaina sādhanā consists chiefly in moral, devotional and ascetic practices which lead to the soul's liberation through destruction of the effects of karma. These practices may have subjective utility, but they do not produce any objective and permanent state of blissful consciousness. Further, the Jaina conceptions about self, karma and liberation suffer from serious defects and inconsistencies. Nyāya-Vaiśeṣika sādhanā is just the contemplation of the self as distinct from the mind-body structure. Continued meditation on this truth results in the intuition of the true nature of the self and thereby leads to the cessation of suffering. But this is not possible in so far as mere intuition cannot cut off the real connection between soul and body or mind. For similar reasons, the Sāṅkhya-Yoga sādhanā must be rejected as ineffective and impossible too. Karma-sādhanā, as advocated by the Mīmāṁsakas, consists chiefly in the performance of religious rites and duties as enjoined by the Vedas. But it makes certain unwarrantable assumptions regarding the Vedas, karma and apūrva, and cannot, therefore, be acceptable to any rationalistic thinker. Bhakti-sādhanā consists in cultivating the emotion of love and admiration for God, and in the regular habit of meditation and prayer to Him. It takes different forms according to the different conceptions of God. But it is vitiated by a perverse belief that God appears in visible form before the devotee and communicates with him. Further, the conflicting assertions of the devotees themselves prove that their religious experiences are all subjective and have no reference to objective reality. The incarnation of God and the kingdom of God are figments of the imagination. Jñāna-sādhanā is held in high esteem by the intellectuals of every age. According to it, ignorance is the ultimate cause of our bondage and suffering, and liberation consists in the direct knowledge of absolute truth which removes ignorance once for all. This direct knowledge is a supersensuous perception of absolute truth which is to be attained through constant hearing about, and reflection and meditation on, the truth. But, like other forms, this sādhanā makes certain impossible demands on its advocates to realise the individual self as identical with or as a part of absolute reality. The wide divergence of opinions that we find among the followers of this path also shows that it has no firm basis in any objective reality, but is dependent on the subjective experiences of different individuals.

Three appendices have been added to the book. In the first, the author has criticised the law of karma as found in Indian systems of philosophy and in non-Indian theistic faiths like Zoroastrianism, Judaism, Christianity and Muhammadanism. In the second, after examining metaphysical realities like absolute, God, self and matter, he comes to the conclusion that the human understanding is not competent to solve metaphysical problems about supersensuous reality. It is in the last appendix that we get some constructive suggestions from the author for sādhanā without metaphysical assumptions. His idea is that we can minimise our sufferings and enjoy life to some extent by purging it of impurity, weakness and fickleness. This is to be effected by self-control,

self-teaching and meditation. In meditation our attitude should be one of indifference, in which the self lets the flow of thought go on but not affect it, and itself remains 'the disinterested onlooker of the mechanical flow of thoughts.' In conclusion the author criticises and rejects the doctrine of the harmony of all faiths as an ungrounded assumption.

The book is a remarkable production. It combines in itself the results of mature critical thinking and prolonged spiritual training. It gives clear evidence of the author's vast erudition in philosophy and religion, and of his powers of acute, penetrating analysis. But the results of his critical enquiry seem to be defective from the standpoint of both philosophy and religion. The central issue raised by him, namely, whether sādhanā has reference to any objective supersensuous reality, can be decided only in the light of actual experience of it. That the author has himself no such experience is no ground for denying its presence or possibility in others. The course of sādhanā recommended by him is closely analogous to that of the Buddhist and, like it, cannot dispense with the possibility of a supersensuous experience of the self as a transcendent reality. How otherwise can he speak of "objectless meditation" which is obviously an experience of the self as pure consciousness? How, again can he recommend an attitude of meditation in which one says: "Let me watch the mental states,.....let not *myself* be affected by them, let *myself* be the disinterested onlooker of the mechanical flow of the thoughts?" It may be true that we cannot explain how this is possible. But for that we should not deny the reality of pure self-consciousness. We may not be able to explain the origin of life, and yet we have no doubt about its existence in the body. In his anxiety to secure logical certainty in all matters, the author goes so far as to say that the intuition of supersensuous reality (*i.e.*, self) is a subjective experience which has no objective validity. But we are not given to understand what he exactly means by 'objective.' If by 'objective' he means what is given through sense, then the experience of self is certainly subjective and it is illegitimate to try to make it objective, since of the supersensuous we cannot have a sensuous experience. If, however, by 'objective' he means what is independent of all experience, then perhaps nothing can be objective, for what is independent of all possible experience is unknown and unknowable. Further, if the different forms of sādhanā have subjective utility and give us subjective satisfaction, is it not reasonable to think that they must have an objective basis? Can anything which is purely imaginary give us permanent satisfaction? Religion is, above all, a way of life, a mode of living, which is based on certain peculiar and unique experiences of the self. It does not matter much for the religious life, if it is connected with a good metaphysic or a bad metaphysic. As the author himself says, 'the human understanding should ultimately surrender itself to the consciousness that the mystery of the world is insoluble.' If this be so, a religious man should take better care of his life than of his philosophy. If his life is satisfying to himself and gives satisfaction to others, then that is all we require of him; it makes little difference if his metaphysic is good, bad or indifferent. Buddha gave us no metaphysics but the way of living a pure life of love and service to all. If any sādhanā develops and stabilizes this ideal life in us, let men follow it and let us not mar the harmony of their life by raising problems which are either insoluble or illegitimate.

S. C. CHATTERJEE

National Reconstruction.—By Chandra Chakrabarty. Published by Vijaya Krishna Brothers. Price Re. 1. Pp. 126.

The author is a prolific writer on subjects so varied as theology and botany, medicine and politics, sexology and public administration, history and dietetics. This encyclopædic sweep is not, however, maintained by the author's performance. The present book purports to be a plan for reconstructing India on a rational basis. Poverty, ignorance and superstition, we are told, are the three maladies from which India suffers today. On the economic side, according to the author, collective and co-operative farming and high industrialisation "have become the vital need of the country. The problems of economic reconstruction are, however, hardly tackled by the author. Politically, India needs a representative democratic government which must be inexpensive and at the same time effective." The author draws up an ordinary scheme of Federal constitution based on the admission of India to Dominion Status. A sound system of village self-government is to be the foundation of the constitution. "Indian Nationalists" argues the author, 'should also realise that however desirable may be the ideal of independence, it is not *real politics* yet."

On the social side Mr. Chakrabarty advocates a thoroughgoing reform of Indian food, dress and marriage system. He would have us—men and women—go about in shorts or trousers and straw-hats; he recommends the preparation of 'synthetic food' and increase of food supply by 'electro-culture' and 'utilisation of solar rays,' he proposes divorce, pre-nuptial love and compulsory medical examination of intending parties to a marriage. The suggestions, though not novel, are interesting.

In the first two chapters of the book the author attempts, ineffectually, the herculean task of summarising the trend of Indian history from Mohenjo-Daro to the present day. The chapters contain a lot of useful information, ill-arranged and ill-digested. Composition and style of the author leave much to be desired.

NIRMALCHANDRA BHATTACHARYYA

India Speaks.—By B. Koyal, M.A. Published by S. K. Lahiri & Co., Ltd. Price Re. 1. Pp. 106.

The book contains a selection of speeches by Indian leaders and is primarily meant for school students. Mr. Koyal, the able editor, deserves our thanks for the production. The book reminds us of our national struggle, of the leaders—past and present, of their services in different fields of national activity. A careful study of the book would afford a liberal education in patriotism.

The art of speech is an indispensable instrument of popular government. Coming of democracy in India, therefore, demands an increasing cultivation of the art. So a publication of this nature is really opportune. It is all the more welcome, because public speaking appears to be a neglected art in Bengal today. The deterioration of the average standard of speaking in our province strikes any casual listener at assemblies, conferences and public meetings. Few of our speakers seem to realise what the editor of this useful brochure seeks to emphasise: Effective speech depends on the capacity and willingness to take pains for it. In this connection the editor has set out in the introduction a good summary of the principles of public

speaking formulated by great exponents of the art like Lord Chesterfield, Gladstone and John Bright.

There is room for difference of opinion as to the inclusion of some of the speeches contained in the book. Again, readers will miss very much in a book like this, an example of the finished parliamentary eloquence of Mr. Bhulabhai Desai, the ablest parliamentarian of modern India, none of whose speeches has been included in the selection. The bibliography might have been enriched by the addition of Curzon's 'Modern Parliamentary Eloquence' and other standard treatises on the art of speech. But these are minor matters. The book can very confidently be commended to the reading public.

NIRMALCHANDRA BHATTACHARYYA

Ourselves

[I. Sir S. Radhakrishnan Honoured.—II. University Representative on Provincial Text Book Committee.—III. Dr. Satyacharan Chatterjee.—IV. Proposed Changes in the Regulations.—V. New Rules for Female Candidates for the Matriculation Examination.—VI The Date for the Supplementary Matriculation Examination.—VII. Supplementary Matriculation Examination, December, 1939.—VIII. A New Fellow of the University.—IX. The University Bureau of the British Empire.—X. A New D.Sc.—XI. A New Endowment for the Award of a Medal.—XII Report on the L.T. and B.T. Examinations.—XIII. Report on the B.A. Examination, 1939.—XIV. Report on the B.Sc. Examination, 1939.—XV. Report of the Board of Examiners for the D.P.H. Examination, Part II, May, 1939.—XVI. Report on the Teachers' Training Examination, April, 1939.—XVII. Report on the Teachers' Training Examination in Geography, April, 1939.—XVIII. Reports on the Preliminary, Intermediate and Final Examinations in Law, June, 1939.—XIX Dates for Teachership and Training Examinations.—XX. Dates for the next D.P.H. Examination, Parts I and II.—XXI. Subjects for the Jubilee Research Prize in Arts and Science, 1941.—XXII. Post-Graduate Courses at the Imperial Agricultural Research Institute, New Delhi.—XXIII. Dr. Maryla Falk Arrives in Calcutta.—XXIV Government Proposal of Discontinuing Publication of University Results in the Calcutta Gazette.—XXV. Cotton College, Gauhati.—XXVI. The Viśva-Bhāratī.—XXVII. The International Congress of Mathematicians.—XXVIII. Government Grant to Non-Government Colleges.]

I. Sir S. Radhakrishnan Honoured

Sir Sarvapalli Radhakrishnan, George V Professor of Philosophy, Calcutta University and Spalding Professor of Eastern Religion and Ethics, Oxford University, has recently been elected a Fellow of the British Academy. He is the first Indian to be so honoured.

We offer our congratulations to Sir Sarvapalli on the high honour bestowed on him.

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II. University Representative on Provincial Text Book Committee

Mr. Sailendranath Mitra, M.A., has been nominated by the Syndicate to be the University representative on the Provincial Text Book Committee for a period of three years. Mr. Mitra served on this Committee last year also.

* * *

III. Dr. Satyacharan Chatterjee

We congratulate Dr. Satyacharan Chatterjee, D.Sc., F.R.G.S., on his having obtained the Premchand Roychand Studentship in Scientific

Subjects for 1938. Dr. Chatterjee's thesis was on 'A Preliminary Note on some basic and ultra-basic rocks found near Garumahisani Pahar, Mayurbhanj.' Dr. Chatterjee is the first Doctor in Geology of this University.

* * *

IV. Proposed Changes in the Regulations

Certain changes in the Regulations are under consideration by the University. It is proposed to allow a candidate who fails at an examination to reappear only in the subject or subjects in which he has failed. This concession will be available to a candidate for two years after the first failure. At the end of this period he will have to sit for all the subjects. A candidate who thus appears in one or two subjects only, when successful, will be declared to have merely passed the examination without being placed in any division. This rule, when formally passed by the Senate and approved by Government, will apply to the I.A., B.A., I.Sc., B.Sc , and B.Com. Examinations. But the compartmental system of examination will not be allowed at the Matriculation stage.

As regards B.A. and B.Sc. Honours Examinations, a candidate who fails in the Honours subject will have free choice between the Honours and the Pass course in the subject. If he passes the Honours examination during the two years after the first failure, a star mark will be placed against his name to show that he has received qualifying marks for Honours.

The following Committee was appointed to consider the proposed changes in the University Regulations and report to the Syndicate:—

The Hon'ble the Vice-Chancellor
Bhupatimohan Sen, Esq., M.A. (Cantab.), M.Sc.
The Hon'ble Mr. Justice C. C. Biswas, C.I.E., M.A., B.L.
Pramathanath Banerjee, Esq., M A., B.L., BARRISTER-AT-LAW, M.L.A.
Syamaprasad Mookerjee, Esq., M.A., B.L., D.LITT., BARRISTER-AT-LAW, M.L.A.
Rev. Allan Cameron, M.A., B.D.

* * *

V. New Rules for Female Candidates for the Matriculation Examination

Every female candidate seeking admission to the Matriculation Examination will have to state in her application whether she has previously read in any school ; if so, the class from and the year in which she left must also be mentioned by her.

The explanatory note added to the above rule runs as follows:—

" Female candidates who have attended any recognised school within one year previous to the examination shall not be allowed to appear as private students. If this fact is suppressed, the admission of the candidates to the examination will be cancelled.

" Students who had discontinued their studies from a class lower than the Matriculation Class will not be permitted to appear at the examination until the time when they would have completed the Matriculation course if they had continued their studies in a recognised school. The Syndicate may relax the operation of this rule in the case of a candidate who with the previous permission of the Syndicate appears at and passes the test examination held by the Inspectress of schools or under her orders or by any school approved in that behalf by the Syndicate."

* * *

VI. The Date for the Supplementary Matriculation Examination

The Supplementary Matriculation Examination under the existing Regulations will commence on Monday, the 4th December, 1939. Applications and fees for admission to the examination should reach the Controller of Examinations on or before Monday, the 18th September, 1939.

* * *

VII. Supplementary Matriculation Examination, December, 1939

The Registrar, Calcutta University, has issued a notice in connection with the Supplementary Matriculation Examination, December, 1939, to the effect that the following classes of candidates will not be

required to apply to the University for special permission to appear at the examination :—

(1) Regular candidates from recognised High Schools.

(2) Regular candidates who were unsuccessful at the last or any previous examination and desire to appear at the Supplementary Examination as private candidates on passing the test examination of the recognised High Schools from which they appeared at the previous examination.

(3) Regular candidates who were eligible to appear at the last examination but could not, for some reasons, sit for it, and desire to appear at the Supplementary Examination as private candidates on passing the test examination of the recognised High Schools where they had previously read.

(4) Private candidates who will appear at the test examination to be held by a Divisional Inspector of Schools.

(5) Private candidates who appeared at the test examination of a recognised High School specially selected or authorised by the University for the purpose but failed at the last Matriculation Examination and desire to appear at the Supplementary Matriculation Examination as private candidates on passing the test examination of the same school.

Candidates who failed at the Matriculation Examination shall produce before the Head Masters concerned their Admit Cards which should accompany their application forms for admission to the examination.

Candidates other than those mentioned above must obtain the permission of the University for appearing at the Supplementary Matriculation Examination.

* * *

VIII. A New Fellow of the University

Lt.-Col. J. C. De, M.B., M.R.C.P., M.R.C.S., I.M.S., has been nominated an Ordinary Fellow of the University, *vice* Lt.-Col. T. C. Boyd resigned. Lt.-Col. De has been attached to the Faculty of Medicine. He has also been appointed a member of the Board of Studies in Medicine.

* * *

IX. The University Bureau of the British Empire

The following gentlemen have been nominated by our University for election to the Executive Council of the University Bureau of the British Empire. The election will take place on the 30th September, 1939, when the Annual General Meeting of the Council will be held :—

1. Sir William Ewart Greaves, KT., M.A., D.L., BARRISTER-AT-LAW.
2. Sir S. Radhakrishnan, KT., M.A., D.LITT., F.B.A.
3. R. Littlehailes, Esq., C.I.E.

The members elected will hold office for one year only.

* * *

X. A New D.Sc.

Mr. Dineschandra Sen, M.SC., who submitted a thesis entitled "The Theocarbonyl Group" in support of his candidature for the Degree of Doctor of Science, has been admitted to that degree. His work was examined by a Board consisting of the following examiners: Sir William J. Pope, K.B.E., D.SC., F.R.S., Sir G. T. Morgan, O.B.E., D.SC., F.R.S., and Dr. Harold King, D.SC., F.R.S.

We congratulate Dr. Sen on his success.

* * *

XI. A New Endowment for the Award of a Medal

The Secretary, "Satyasram," has placed at the disposal of the University Rs. 500 in 3½ per cent G. P. Notes for the creation of an endowment for the annual award of a silver medal to be called "Sri Srimat Taracharan Paramahansa Medal." This medal will be awarded at the Convocation of the University to the candidate who is placed first in the First Class with Honours in Bengali. If, however, there is no First Class in Bengali in a particular year, it will go to the candidate who secures the highest number of marks from among the successful candidates at the B.A. Examination with Honours in Bengali, Sanskrit, Philosophy or History.

* * *

XII. Report on the L.T. and B.T. Examinations

The number of cadidates registered for the L.T. Examination, 1939, was 19, of whom 16 passed.

Of the successful candidates 5 passed in the First Class and 11 in the Second.

The percentage of passes is 84·2. The percentage of passes was 100 in 1938.

The number of candidates registered for the B.T. Examination, 1939, was 275, of whom 2 were absent.

The number of candidates who actually appeared was 273, of whom 209 passed.

Of the successful candidates 39 passed in the First Division and 152 in the Second.

The percentage of passes is 76·1.

The percentage of passes was 68·1 in 1938.

* * * *

XIII. Report on the B.A. Examination, 1939

The number of candidates registered for the examination was 4,536 (including those registered to appear in one, two and three subjects only), of whom 164 were absent. The number of candidates who actually sat for the examination was 4,372, of whom 6 were expelled, 3,016 were successful and 1,350 failed. Of the successful candidates 2,615 were placed in the Pass List and 387 on the Honours list. Of the candidates in the Honours List 39 were placed in the First Class and 348 in the Second Class. Of the candidates in the Pass List 184 passed with Distinction.

The number of candidates who have passed in one subject only is 3 and in two subjects is 8 and in 3 subjects is 3.

The percentage of passes is 68·9.

The percentage of passes was 61·2 in 1938.

* * *

XIV. Report on the B.Sc. Examination, 1939

The number of candidates registered for the examination was 901, of whom 21 were absent. The number of candidates who actually sat for the examination was 880, of whom 3 were expelled, 667 were

successful and 202 failed. Of the successful candidates 557 were placed in the Pass List and 103 in the Honours List. Of the candidates in the Honours List, 15 were placed in the First Class and 88 in the Second Class. Of the candidates in the Pass List 192 passed with Distinction.

The number of candidates who have passed in one subject is 7.

The percentage of passes is 75·8.

The percentage of passes was 71·3 in 1938.

The admission of some candidates to the B.A. and B.Sc. Examinations was cancelled for adopting unfair means.

* * *

XV. Report of the Board of Examiners for the D.P.H. Examination, Part II, May, 1939

The number of candidates registered for the Examination was 6, of whom 3 passed, 3 failed, none was absent.

* * *

XVI. Report on the Teachers' Training Examination, April, 1939.

The number of candidates registered for the examination was 61, of whom 2 were absent.

The number of candidates who actually sat for the examination was 59, of whom 48 were successful.

Of the successful candidates 3 passed with Distinction.

The percentage of passes is 81.

The percentage of passes was 90·1 in September, 1938.

The percentage of passes was 84·6 in April, 1938.

* * *

XVII. Report on the Teachers' Training Examination in Geography, April, 1939

The number of candidates registered for the examination was 133, of whom none was absent, and 125 were successful.

Of the successful candidates 5 passed with Distinction.

The percentage of passes is 93·9 (April, 1938—95·5).

* * *

XVIII. Reports on the Preliminary, Intermediate and the Final Examinations in Law, June, 1939

Preliminary Examination in Law, June, 1939

The number of candidates registered for the examination was 416, of whom 34 were absent.

The number of candidates who actually sat for the examination was 382, of whom 195 passed, 186 failed and 1 was expelled.

Of the successful candidates 10 were placed in the First Division and 185 in the Second.

The percentage of passes is 51.

The percentage of passes was 58·43 in December, 1938

Intermediate Examination in Law, June, 1939

The number of candidates registered for the examination was 295, of whom 22 were absent.

The number of candidates who actually sat for the examination was 273, of whom 206 passed and 67 failed.

Of the successful candidates 17 were placed in the First Division and 189 in the Second.

The percentage of passes is 75·4.

The percentage of passes was 74·01 in December, 1938.

Final Examination in Law, June, 1939

The number of candidates registered for the examination was 313, of whom 25 were absent.

The number of candidates who actually sat for the examination was 287, of whom 196 passed, 91 failed and 1 was expelled.

Of the successful candidates 13 were placed in the First Division and 183 in the Second.

The percentage of passes is 68·2. (December, 1938—66·24%)

* * *

XIX. Dates for Teachership and Training Examinations

The commencing dates of the undermentioned examinations have been fixed as follows :—

(1) Teachers' Training Certificate (General)—4th October, 1939.

(2) Teachers' Training Certificate (Geography)—2nd October, 1939.

(3) English Teachership Certificate—3rd October, 1939.

* * *

XX. Dates for the Next D.P.H. Examination, Parts I and II

The following dates have been fixed for holding the D.P.H. Examinations, Parts I and II :—

D.P.H., Part I—Monday, the 4th September, 1939.

D.P.H., Part II—Thursday, the 21st September, 1939.

* * *

XXI. Subjects for the Jubilee Research Prize in Arts and Science for 1941

The following subjects have been selected for the Jubilee Research Prize in Arts and Science to be awarded in 1941 :—

Arts

1. Economic Planning in Bengal as a solution for the Problem of Unemployment.

2. India's Cultural Contact with the Chinese Empire during the Hindu Period.

Science

1. Standardisation of Illumination with particular reference to width, surface and traffic condition of modern roads in a city.

2. Causes of blindness in the villages of Bengal and statistical collection of the number of partially blind and blind in Bengal.

* * *

XXII. Post-Graduate Courses at the Imperial Agricultural Research Institute, New Delhi

The Director of Agriculture, Bengal, has written to the University on behalf of the above Institute, requesting that names of suitable candidates for admission to the Post-Graduate courses in Agriculture may be sent to his office so that they may be forwarded to the Imperial Agricultural Institute with the recommendation of the Provincial Selection Committee by the first week of September, 1939.

The Agriculture Department of Bengal has decided to award two scholarships of the value of Rs. 50 per month each for two years to deserving candidates, one of whom would be required to study Mycology and the other Entomolgy. The awards will be made to applicants to be selected by the Agriculture Department, Bengal, from among those whom the University will recommend for admission to the Post-Graduate courses in Agriculture at the Imperial Agricultural Research Institute, New Delhi.

The University has authorised Professors Jnanendranath Mukherjee and S. P. Agharkar to recommend names of suitable candidates for the course.

* * *

XXIII. Dr. Maryla Falk Arrives in Calcutta

The Polish Ministry of Public Instruction in co-operation with the Warsaw University has delegated to India Dr. Maryla Falk, a distinguished lady Indologist who has published many learned articles in English, French, German and Italian. She formerly held the Readership in Polish Language and Literature in Rome.

Dr. Falk proposes to deliver a series of lectures at this University with a view to facilitating Indian as well as Polish scientific research in the field of Philology

* * *

XXIV. Government Proposal of Discontinuing Publication of University Results in the *Calcutta Gazette*

The Education Department, Bengal, has invited the opinion of the University to its proposal of discontinuing from next year the publication of the lists of candidates who pass the different examinations held by the University, in view of the fact that authoritative lists are now being published by the University and that the Calcutta Gazette in which they are published again are issued at a later date and are sold at a higher price. The Education Department has been informed that the University will communicate its views on the subject by the middle of August, this year.

* * *

XXV. Cotton College, Gauhati

The Cotton College, Gauhati, has been granted affiliation in Biology to the I.A. and I.Sc. standards with effect from the beginning of the present academic session (1939-40).

* * *

XXVI. The Viśva-Bhāratī

The Viśva-Bhāratī (Santiniketan) has been recognised to the B.A. Honours standard in Bengali from the commencement of the present academic session (1939-40).

* * *

XXVII. The International Congress of Mathematicians

Our University has sent its good wishes to the International Congress of Mathematicians on the occasion of its forthcoming session to be held in Cambridge, Massachusetts from September 4 to 12 in 1940.

* * *

XXVIII. Government Grant to Non-Government Colleges

The Government grant for the year 1939-40 amounting to Rs. 80,000 has been distributed by the University to the non-Government Colleges, the sum of Rs. 3,000 being held back out of this grant to meet special requisitions from the colleges during the session. The grant has been made available for the expansion and equipment of libraries, laboratories, gymnasiums, playgrounds, swimming pools, etc. The grants received by the different colleges are shown below:—

A. M. College (Mymensingh)—Rs. 2,500 ; Ashutosh College (Calcutta)—Rs. 3,500 ; Bangabasi College (Calcutta)—Rs. 2,500; Bankura College—Rs. 2,000 ; B. M. College (Barisal)—Rs. 2,500 ; Burdwan Raj College—Rs. 1,500 ; Carmichael College (Rangpur)—Rs. 2,500 ; City College (Calcutta)—Rs. 3,000 ; Hindu Academy (Daulatpur)—Rs. 2,500; Edward College (Pabna) Rs.—1,500 ; Feni College—Rs. 2,500 ; Narsingh Dutt College (Howrah)—Rs. 1,500 ; Saadat College (Karatiya)—Rs. 3,000; Krishnachandra College (Hetampur)—Rs. 2,000 ; Loreto House

(Calcutta)—Rs. 750 ; Midnapur College—Rs. 1,500 ; P. K. College (Contai)—Rs. 2,000 ; P. C. College (Bagerhat)—Rs. 2,500 ; Rajendra College (Faridpur)—Rs. 2,000 ; Ripon College (Calcutta)—Rs. 3,000 ; Scottish Church College (Calcutta)—Rs. 3,000 ; Serampur College—Rs. 1,500 ; St. Helen's College (Kurseong)—Rs. 250 ; St. Joseph's College (Calcutta)—Rs. 500 ; St. Paul's College (Calcutta)—Rs. 2,500 ; St. Paul's College (Darjeeling)—Rs. 500 ; St. Xavier's College (Calcutta)—Rs. 2,500 ; Uttarpara College—Rs. 1,500 ; Victoria Institution (Calcutta)—Rs. 3,000; Victoria College (Narail)—Rs. 1,500 ; Victoria College (Comilla)—Rs. 2,500 ; Vidyasagar College (Calcutta)—Rs. 2,500; Gokhale Memorial Girls' College (Bhowanipur)—Rs. 1,000 ; Salesian College—Rs. 500 ; St. Joseph's College (Darjeeling)—Rs. 500 ; Sir Ashutosh College (Chittagong)—Rs. 2,000 ; Haraganga College (Munshiganj)—Rs. 1,000 ; Bogra College—Rs. 2,000 ; South Calcutta Girls' College—Rs. 1,000 ; Krishnath College (Berhampore)—Rs. 2,500.

THE
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THE COMMUNAL AWARD AND INDIAN NATIONALISM

PROFESSOR H. C. MOOKERJEE, M.A., PH.D.,
Fellow, Calcutta University; Member, Legislative Assembly, Bengal; President, Bengal Evangelistic Mission; President, Baptist Lay Association, Bengal; President, All-India Conference of Indian Christians.

IT was Mahatma Gandhi who pointed out years ago that India is the land of divisions. For instance, even before we dreamt of enjoying local self-government, we had States India and British India. Within British India, we had Hindu India and Muslim India. Recently within Hindu India we have High caste, Intermediate caste and Scheduled caste India. From what will be said later on, it will be abundantly clear that in Muslim India also there is apprehension of a Shiah and a Sunni India, of a Shareef and a Razeel India and of a Momin and a non-Momin India. Similarly, in Scheduled caste India, we may, before long, expect the appearance of various sub-groups. All this was anticipated years ago and warnings issued but they were not heeded.

It has, however, to be said in all fairness that before the Communal Award was made in August, 1932, the Indians who were called to the Round Table Conference were afforded more than one opportunity to discuss the matter among themselves and to arrive at an

agreed solution. It has to be admitted with regret and humiliation that this was not done and that difficulties were put in the way by our own flesh and blood. These facts should be borne in mind by those uncharitable nationalists who try to lay all the blame on the British Government for introducing this most mischievous of devices for subdividing our countrymen into conflicting groups.

Nor can the British be held entirely blameless. It was on the 1st October, 1906, when Lord Minto received a deputation of Indian Muslims, that the British Government, through the Governor-General, committed itself to the acceptance of the principles underlying the communal award. It is now known that the deputation was not altogether spontaneous and that the inspiration had really come from Simla. It is held by National India that the Home Department was aware that the Reforms were imminent and that it sought to counter them by creating division between the two largest communities in India. The position of the unofficial Englishmen was summed up in the statement: "If Hindus and Muslims united, where should we be?"

Lord Morley in his celebrated despatch of 1908 tried to minimise the evil by suggesting joint electorates with reservation of seats, but agitation against his proposal was immediately engineered in India. The Government of India found this proposal unacceptable and defined its policy on the question through Sir Herbert Risley, one of the ablest and most reactionary of officials. In the Mussalman community men were not wanting who aimed at securing an advantage to their community by organising communal agitation against the proposal of Lord Morley and thus strengthening the hands of its official opponents. This opposition found spokesmen in the House of Commons, the most conspicuous among whom were the Earl of Ronaldshay, the present Lord Zetland and the late Sir William Joynson-Hicks, afterwards Viscount Brentford. Lord Morley had to yield probably because he felt that if he resisted, his bill would be wrecked in Parliament.

The Montague-Chelmsford Report discussed the principle of separate electorates fully and accepted it. On the plea of securing just representation to all communities, this pernicious system so destructive of Indian nationalism was recommended by the framers of the Indian constitution. It was in reality the decision of the British Government. It was very unfair to the Hindus and most so to the Hindus of Bengal and the Punjab where they form minorities. Sir

Samuel Hoare, the then Secretary of State for India, thrust the communal award on us. Following in his footsteps, the Viceroy in Council gave a communal award with regard to recruitment to the public services.

I well remember that when the Indian National Congress was born in 1885, it was characterised as a "Babu" Congress because many of the prominent leaders were Bengali intellectuals. Later on, when it had as Presidents progressive leaders from Madras, Bombay, Punjab, U. P., Bihar and C. P., it was called an organisation of "the educated and discontented microscopic minority middle classes" and that as such it could not be regarded as a representative body reflecting the political opinions of the country at large. It was also contended that the uneducated masses had no political opinions at all. When Mahatma Gandhi appeared on the scene and when political mass consciousness was aroused, when Mazdoor Sabhas and Kishan organisations were to be seen in every part of the country, when the Congress had about 4½ million primary members, and we do not know how many million sympathisers, we are expected to accept the view that because some Indians are members of communal organisations such as the Muslim League or the Hindu Mahasabha, there is such organic lack of unity in our motherland that we cannot be expected to govern ourselves well, that the majority if entrusted with power will ill-treat the minorities for all times to come and therefore the latter need all kinds of safeguards such as are sought to be provided under the communal award.

One may well ask whether in any democracy which has the system of party Government, there is ever an absolute unanimity. The different parties have to learn the value of unity in things essential by fighting and quarrelling and then compromising with one another. No foreign Government, however benevolent its intentions, can either forestall or prevent altogether this more or less painful process of unification. However pure and unselfish its motives, intervention is always liable to be interpreted—or, if you prefer the term, misinterpreted—as proceeding from interested motives. And this misinterpretation is only too likely in the case of Britain in view of the large financial and other stakes she has in this country, the financial drain to which India has been subjected for nearly a century and a half for her benefit and the slowness with which she is relaxing her grasp over India. I acknowledge that we too would have done the same

and perhaps worse things if we had occupied the position of Britain. None the less it is only natural if criticism of this type is levelled against what is, after all, foreign domination.

The acceptance of the principle of separate electorates by the Lucknow Congress, probably in the hope of winning over the Muslims, might have been a good move from the point of view of expediency, but I contend that it has produced evil consequences of a far-reaching character, and no one can say to-day to what further evil it will ultimately lead. It is likely that if, from the beginning, a national organisation like the Congress had put up a vigorous fight, we would have, if not joint electorates, at least something which, while a sort of compromise, would not have established the cleavage among Indian nationals we see in our country to-day.

We in India are reaping to-day the fruits of this most objectionable of political measures. I propose to deal with the evil effects of this measure in some only of its many aspects.

Tyranny of the Majority

The communal award with its implication of separate electorates has made it possible for many undeserving people to enter the different legislatures by appealing to the narrow communalism of the groups from which they come. In order to ensure political support, such people have been compelled to make large promises which they constantly attempt to carry out. Naturally, there is difference of opinion between such narrow-minded men whose only aim is the immediate benefit of the groups they represent and the more liberal-minded, who prefer the slow but sure and peaceful progress of the country as a whole. This clash of opposing ideals has taken many forms but the one proposed to be dealt with here is the tyranny which is exercised by the majority over the minority when the former desire to carry through their plans without vocal opposition from any quarter.

In September, 1938, the Opposition in the provincial legislature of Bengal tabled no confidence resolutions against the present cabinet. This move was defeated only with the help of the 25 European and 3 Anglo-Indian members. At that time, monster processions of Muslim supporters rendered the streets impassable; access to the Council Houses was almost impossible. Many members of the Opposition were insulted and some actually assaulted. Inflammatory literature

which proclaimed that the defeat of the present cabinet would be followed by the demolition of mosques, difficulties in procuring printed copies of the Muslim scriptures and other equally highly misleading statements were circulated. These matters were raised in the House but, so far as I am aware, no steps were taken to find out and punish the guilty. I do not suggest that either the cabinet as a whole or particular members had engineered this unparliamentary way of showing the sympathy of certain sections of the Muslims of Calcutta for the present cabinet. It cannot, however, be denied that the fruits of this indirect intimidation were enjoyed by those in power at that time and also that their hold on the country if gauged by the votes of Indian nationals was so slender that it needed buttressing by the support of foreigners. I maintain that this kind of tyranny of the majority over the minority is more likely to be found in a communally-ridden atmosphere than elsewhere and that, but for the communal award it would not have assumed such objectionable proportions.

Where the majority community is unreasonable and is determined to break down all opposition it can, if it so desires, prevent discussion of controversial matters in public meetings. For instance, the Calcutta Municipal Amendment Act which has lately been passed by the Legislative Assembly and the Legislative Council was vehemently opposed by the Hindus of Calcutta and the nationalist section of the Mussalman community. A number of public meetings were called in order to discuss this highly controversial piece of legislation. Many of these could not be held on account of the disturbance created by a certain section of the Muslim community which favoured the measure probably on communal grounds.

Similarly, the Jamait-ul-Ulema Conference of Bengal which met in Calcutta on the 3rd June, 1939, could not hold its sittings on account of the rowdyism of those opposed to the political opinions of this organisation. This association is composed of Mussalmans holding progressive political views and its opponents are said to consist of members of the Muslim League. Cries of " Muslim League Zindabad " and similar other slogans were shouted for hours at a stretch so that inspite of loud-speakers, the audience could not hear a single word of what the speakers said.

It is true that a moderate amount of heckling at meetings has come to be regarded as permissible but, even then, the audience is expected to preserve a certain standard of decorum. In all these

cases, the police had to intervene in order to prevent serious clashes between the organisers of the meetings and their sympathisers on the one hand and the rowdier elements of the Muslim League on the other. The growing tendency to deny the minority party freedom of speech and discussion is coming to be a very disquieting feature of public life. And this is one result of the communal award under which rowdyism of this type is not checked by leaders who prefer to keep themselves in the background while enjoying to the full the advantages contingent on this kind of behaviour on the part of their followers.

It is a regrettable but none the less an undeniable fact that communal riots have occurred in our motherland with lamentable frequency. It is also equally true that, without the co-operation of the leaders of the different communities, the unaided efforts of the provincial governments cannot be expected to restore good feelings between the contending parties. This method has been tried with notable success in Bihar and U. P. I can speak on it with some degree of authority as I was in those parts of India when this work was being done. In such matters, one naturally expects the representatives of the people in the legislatures to take a prominent part. It is not implied that they failed to do so in these provinces. My contention is that a representative whatever the religious faith he professes so long as he is returned from a general electorate has a greater hold on the people as a whole than one returned from a separate communal electorate. The former even if he is a communalist at heart must maintain an outward show of goodwill and sympathy, preach good feelings, while it is to the interest of the latter to keep apart the contending parties as much as possible, for thus only can he consolidate his position.

It has been stated in the papers that the communally-minded Muslims of Sind are finding fault with the Allah-Bux ministry because it has not carried out a resolution accepted unanimously at the Sind Muslim League Conference which met at Karachi in October, 1938. This resolution recommended that 70 per cent. of all appointments under Government should be set apart for Mussalmans and that Hindu recruitment should be stopped till this percentage was reached. This percentage was fixed because in this newly-created province the Muslims constitute about 90 per cent. of the total population.

In the Punjab where the proportion of Muslims to the total population was about 56 per cent. in 1931, the cabinet has reserved 50 per cent. of all Government posts for Muslims and the rest for non-Muslims. Complaints are occasionally heard about the way in which the highly paid posts are supposed to be kept out of the reach of non-Muslims. There is evidence to prove that in the local self-governing bodies, the communalist Mussalmans have often taken advantage of their majority to get rid of non-Muslim employees on the plea of retrenchment and, after keeping the posts vacant for some time, filling them up by engaging their co-religionists. This grew into such a scandal as to draw forth a *communiqué* from the Punjab Government to which I refer my readers for fuller details.

In Bengal, the communal award has given a statutory majority to our Mussalman brethren who, in 1931, constituted about 56 per cent. of the total population. They passed a resolution reserving 60 per cent. of all Government appointments for Mussalmans, 20 per cent. for members of the Scheduled castes and 20 per cent. for the rest. As the result of pressure from various quarters, the proportion has recently been fixed at 50 per cent., 15 per cent., and 35 per cent..

The principle to be adopted in recruitment from the Mussalman and Scheduled caste communities will be the possession of minimum qualifications, though in the case of those who do not come under these two categories this principle will not be followed. As a justification of this unusual policy and it has been stated that the Muslims expect fairer treatment from Muslim than from non-Muslim officers—a charge never brought before against this class of hard-worked, honest Government officials. One would like to know how Mussalman officials who will be in a majority in the future would relish a similar charge of undue partiality towards their co-religionists if any such is brought forward by the Hindus.

Since the above lines were penned, the Premier of Bengal has advanced another rather curious argument to justify the demand for minimum qualifications only from those selected from the Muslim and the Scheduled caste communities to fill up vacancies in certain Government departments. He says that the work of these officers is confined almost exclusively to the rural areas where they have to talk in the local varieties of the vernacular with the peasantry. There is thus no necessity for them to utilise the knowledge imparted in our

colleges. On the other hand, through disuse they forget the " high brow " learning they may have acquired during their career as students. From the above facts the conclusion drawn by our Premier is that the Hindu community which, according to him, can only produce book-learned graduates is not in a position to meet adequately the demand for efficient officers of this type who, in his view, can be had in much larger numbers from among the Mussalmans and the Scheduled castes. Our Premier who is also the Minister in charge of Education is either not evidently aware of, or he very conveniently forgets, that very old and universally accepted theory of education according to which its only aim and purpose is the training of intellectual faculties. For instance, every student has to study a certain amount of mathematics, which is the Premier's own subject, not because he is likely to use it daily or even frequently in his future life but because without this training his mind would remain inadequately developed in one of its many sides. The editor of one of our vernacular monthlies commenting on this most unconvincing of arguments observed that if want of that type of education, which has fitted the Premier himself for the position he is holding to-day in the public life of Bengal, is to be regarded as a qualification, the sooner all the 70 odd colleges of Bengal are abolished and our students sent to the paddy and jute fields of Bengal, the better their chances for securing Government appointments !

Coming back to the point we were discussing, we find that injustice of this type has gone further. The Hindus form about 74 per cent. of the total population of Calcutta, contribute about 78 per cent. of the municipal taxes and constitute more than 75 per cent. of the total number of qualified voters. Mussalmans constitute about 24 per cent. of the total population, contribute 5·41 per cent. of the taxes and form 13 per cent. of the qualified voters. Under the Calcutta Municipal Amendment Act passed recently by the majority Muslim party in our provincial assembly, the Hindus have been artificially reduced to a minority and have been given about 48 per cent. of the seats in the Calcutta Municipal Corporation. And this has been done on the excuse that the Municipal Congress Party has been mismanaging Municipal affairs. The Muslims, on the other hand, have been given a slight weightage. It was openly stated in the House that the only reason for the introduction of the Amendment Bill was to reduce the power of the Congress in the civic administration of Calcutta.

The above examples taken, more or less at random, from different parts of India, merely prove that, in actual working, the communal award tends to produce very mischievous results specially when it places political power in the hands of those not accustomed or trained to use it with discretion.

It may be that such interference with freedom of discussion, injustice in the distribution of Government patronage and similar other matters are to be found in one or other of the Congress provinces as well. Age has taught me that not every Congressman is an angel and that there must be undesirable persons in this large All-India organisation with a membership of over 4½ millions in just the same way as there are similar people in other organisations. My contention is that such things whenever found are a possibility on account of the communal award and further that the only satisfactory method for eliminating these undesirable things is to abrogate it.

Disintegration in the Hindu Community

On the 19th October, 1938, a largely attended meeting of the Barber caste was held in Calcutta, at which a resolution was adopted unanimously urging Government "to give the barbers adequate representation in the Legislature." Another drew the attention both of Government and the Calcutta Municipal Corporation to the necessity for providing free education for the children of barbers.

On the 14th December, 1938, a member of the Mahishya community wrote a letter to the *Statesman* in which he stated that the claims of his community to Government patronage in the shape of reservation of seats have been overlooked. Quoting figures from the Bengal Census of 1931, he pointed out how his community which constitutes about 5 per cent. of the total population of Bengal and the highest among all Hindu communities is backward both economically and educationally. He claimed special and favourable treatment in order to stimulate education among the members of his community by creating definite opportunities for the educated among them for entering Government services.

And now still another group has made its appearance. I find from the papers that quite recently the Satchasi (cultivator) caste people held a meeting at Calcutta in which they urged that in the next Census, that of 1941, they should be regarded as "a cultivating

class under a distinct column of its own." They also expressed the desire that, as the Satchasi and similar other communities stand between the three higher castes and the Scheduled castes, they should be known as the Intermediate Hindu Caste, thus forming a new group inside the Hindu hierarchy. By another resolution, they entered their claims for " a certain percentage of posts in the services out of the 35 per cent. available for the Caste Hindus and also that they should be given preference in case any of the posts under the 15 per cent. reserved for the Scheduled castes remain vacant for want of suitable candidates."

Commenting on their attitude, one of the Calcutta dailies observed: " The organisers of the move would seem to be clever people indeed because their claim is double-edged—in case they cannot get a share out of the Caste Hindu ratio of posts, they ensure their interests by putting in a claim for posts reserved for Scheduled castes ! Is it a question of ' Heads I win, tails you lose ?' " This is how the communal award is operating in breaking up solidarity in the Hindu community, and no one can say to what length this tendency towards disruption will proceed.

My point is that the acceptance or, to be more correct, the enforcement of the principle of communal award has placed a weapon in the hands of Indians which can be used with deadly effect by the selfish for the attainment of their own purposes and that such use is bound to have only one effect, *viz.*, the creation of further antagonistic groups in our unfortunate motherland, already torn asunder by party factions. What, one might well ask, was the utility of the Poona Pact if the restoration of goodwill between the Caste and the Scheduled caste Hindus is renderd nugatory by the appearance of splits inside the Scheduled castes themselves ?

The attitude responsible for meetings and resolutions such as those referred to already gives me great pain. To my mind they merely point the way the wind is blowing. These poor and probably ignorant people have learnt the lesson of selfishness from their social superiors and former leaders. It is only too probable that they will be better than their teachers at this game. And so unless something is done, India will degenerate into a battle-field where questions will be decided not on their merits but on communal groun'ds. I shudder to think of the time when instead of Caste Hindus and Scheduled caste Hindus and Mussalmans, we shall

have two or even three dozen parties, all out to get as much as they can in the struggle for the spoils of office. It may be that our countrymen are constitutionally more selfish than, for instance, the Englishman, the Frenchman or the American. I am, however, certain that their appetite has been more keenly whetted by the communal award than could have been done by any other device. And I am also equally certain that this cannot but lead to disunion which can be profitable only to third parties.

Disintegration in the Muslim Community

The disintegating effects of the communal award are not, however, confined to the Hindu community only which, for historical reasons, includes within its fold hundreds of castes, many of which have been victims of social tyranny and which are now showing their resentment not only in the social but also in the political field. Islam's greatest contribution has consisted in its spirit of democracy but even here the mischievous effects of the communal award are gradually making their appearance. The Secretary of the All-India Shiah Political Conference in an informal meeting of the Shias held at Chapra in North Bihar on the 22nd November, 1938, said : " The Shiahs have it to their proud privilege that they never supported separate electorates." The Shias, he added, had always believed that joint electorates are the only cure for all communal ills and that the system is absolutely essential for the growth of nationalism in our motherland. On the 12th April, 1939, the Organising Secretary of the All-India Shiah Political Conference in the course of a statement to the press said : " The Shiahs have always been opposed to separate electorates and have without any bargaining or safeguards joined the Congress and advocated the cause of joint electorates."

These two quotations to which others of a similar purport could be easily added represent the views of the nationalist Shiahs who form the bulk of their community but there are a fairly large number of Muslim Leaguers also among the Shiahs who believe in the practical utility of the communal award. The Muslim League, which includes in it both Shiahs and a very large number of Sunnis, was taking no active steps to compose the differences between the two sections of the Mussalman community over the Madhe-Saheba and the Tabarra controversy. The Shiah members who wanted to

show their displeasure adopted tactics which are of great interest to the student of human nature.

According to the *United Press,* on the 21st May, 1939 there was a meeting of the Shiahs at Lucknow convened by some prominent Shiah members of the Muslim League. Here the discontent with the League on account of its policy of non-intervention with regard to the doctrinal controversy between the Shiahs and the Sunnis was voiced. As a condition of their remaining within the Muslim League they demanded " the inclusion of Shiah ministers in the Punjab and Bengal cabinets forthwith, lending support to Shiahs in their demand for the inclusion of at least one Shiah minister in every Congress province and particularly in the provinces of Bihar, U. P. and the North-West Frontier, and agitating for a separate electorate to Shiahs or reservation of seats by mutual consent."

It further appears from the special correspondent of the *Statesman* writing from Naini Tal on the 3rd June, 1939, that there has been a recent meeting in Lucknow " where some Sunnis had demanded separate electorates and reservation of seats in the services."

So pernicious in its ultimate effects is the communal award that it presents itself immediately as a weapon for political disruption as soon as there is any difference of opinion between groups forming integral parts of a particular party or organisation. I am certain that when our Mussalman brethren in the language of Ramsay Macdonald were " inspired " to demand communal electorates in order that they might be able to shape the political destinies of their community without any chance of Hindu interference, they never dreamt, even for a moment, that the time might come when the weapon would turn in their hands and prove their own undoing as a community hitherto so well-known for its solidarity. Even the pillars of the Muslim League are coming to realise the untold possibilities for mischief which underlie this apparently harmless device for granting protection to the minority communities. The recognition of this aspect of the matter is probably responsible for the appeal for unity made by the Nawab of Chhatari.

Commenting on this new direction which the Shiah-Sunni controversy is taking, the Nawab of Chhatari has issued a statement through the press in which he has said: " This tendency towards a separation will lead to the disintegration of Muslims in these provinces and will do good to nobody. The real need of our country is to create

unity among various communities living in India. Our efforts should be directed towards unity between Hindus, Moslems, Christians and all other communities and not to create further divisions." And this, I may be permitted to add, is the aim and the dream of every genuine patriot. All our communal and, along with it, much of our political, misunderstanding will come to an end automatically if once the need for this unity is recognised and given effect to.

Quite recently the Momin community has organised itself on an All-India basis. The aim of this All-India organisation is to bring this community "on one common platform to attain its political rights and claims which are being usurped by the capitalist and upper class Muslims." It is stated by the organisers that this movement has achieved such unprecedented popularity and success within a comparatively short time that it has greatly alarmed the upper class and capitalist Muslims. It has been stated that these are carrying on propaganda to crush this movement of the poor and down-trodden Momins. They do not welcome the idea that this particular section of the Mussalman community should grow so strong through organisation that it would be in a position to "resume their rights and shares which the former had so long been enjoying."

It appears that this organisation has become very active. On the 11th May, 1939, there was a meeting of the Muzaffarpore Momin Conference at a village in which the President of the Bihar Momin Conference took the chair. Here resolutions were passed declaring that the All-India Momin Conference was the only representative political organisation of the Momins, that it demands free education for the children of the Momins from the Bihar Government and claims proportionate representation of the Momins in Government services.

Towards the end of May, 1939, the 24-Parganas Momin Conference was held at Kankinara, an important railway centre close to Calcutta. It is said that it was attended by about 30,000 Momins. The President-elect was Mr. Abdul Qaiyam Ansari, the Bihar Momin leader. Speeches were also delivered by Mr. A. A. Md. Noor, M.L.C. (Bihar), Maulana Asim Bihari and Maulana Qazi Md Usman of Darbhanga. So far as one may judge from the reports which appeared in the newspapers, the audience was not only large, but also that the speakers holding high positions in the Momin community voiced grievances which are genuine ones.

In his presidetial address, Mr. Ansari remarked that Muslim rule had failed in India owing to " the utter selfishness and love of power of upper class Muslims who had for their own interests turned a vast majority of the followers of Islam in this country into a low and backward community." Owing to their selfish attitude, " Muslims were unfortunately divided to-day into ' Shareef ' that is upper and ' Razeel ' that is lower sections." The Shareefs had constituted themselves into the guardians of the Razeels and had compensated themselves by " usurping all rights and shares of the latter." To-day out of the 9 crores of Mussalmans in India, 8 crores were poor like the Momin community. They had been systematically exploited by the Muslim politicians all of whom belonged to the " Shareef " or upper class and had demanded and obtained special privileges in behalf of these poor 8 crore Mussalmans and proceeded to enjoy themselves. Continuing Mr. Ansari observed that the game had been exposed and the Momins and the other poorer exploited Muslim masses demanded "their rightful share in seats of legislature, local bodies, in Government jobs on their numerical strength." In order to discredit them, the Shareef Muslims who are guilty " of creating un-Islamic divisions of castes among Indian Muslims for their own interest " were questioning the genuineness of the Momin movement and accusing the Momins of creating dissensions among Mussalmans. Mr. Ansari refused to recognise the Muslim League as the sole representative and the champion of the Mussalmans of India. The Muslim League leaders who professed such concern for them were so heartless " that they did not even use the hand-woven Swadeshi cloth which was the chief mainstay of the Momin community." When they are disinclined to help them in this particular way, it is no wonder that their sympathy is lip-deep.

Mr. A. Mohammad Noor, M.L.C. (Bihar) asked the Momins to join the Momin Conference and never to think of joining the Muslim League which had not done any good to the poor, toiling Muslim masses. He condemned the Pakisthan movement and said that it would involve the poor Muslims in untold trouble and tribulation.

Mr. Ansar, the President, in his concluding speech delivered on the 31st May, 1939, said that the Muslim League was " a rendezvous of Muslim Knights, Nawabs and aristocrats and the poor Momins could, therefore, have naturally no confidence in such a body."

Criticising the Government of Bengal, he said that several of the Mussalman ministers owed their seats in the Assembly and thereby

the ministerships almost entirely to Momin voters. These ministers were drawing fat salaries but never cared for the poor.

In conclusion, resolutions were passed demanding from the Bengal Government seats in legislature and local self-governing bodies and representation in Government services according to the numerical strength of the Momins.

Here again is an interesting example of yet another unexpected way in which the communal award has been sought to be utilised. According to the Momins, they have been systematically exploited by their better-off and more educated Mussalman brethren. Smarting under what they seem to consider very great injustice, they are making an attempt to utilise the principle on which the communal award is founded in order to obtain redress of their grievances. They therefore demand the sharing of the amenities of life on the basis of their numerical strength. Does not this bear a very close resemblance to, if it is not identical in spirit with, the struggle in the Hindu hierarchy between the Caste and the Scheduled caste Hindu ? If the demand is pressed home with sufficient determination as appears only too likely, there is no way out of the very difficult situation except by granting them their claims. Under these circumstances, we must have a Muslim Gandhi ready to fast unto death and a Muslim version of the Poona Pact in order to prevent the political disruption of the Mussalman party so long bound together by the common tie of self-interest seeking to extract as much as possible from the complaisant Hindu community.

It is most unfortunate for our Muslim brethren that, in this case, there was no wise Nawab of Chhatari to give the Momins a lead in the right direction. Probably this kind of advice coming from such a quarter would not have created any difference either in their attitude or in their opinions. At any rate, no one can deny that the masses are now coming to appreciate their strength and are determined to utilise it to the full, to which no one can possibly have any objection. But what is really regrettable is that, under the communal award, this power is not likely to be used in the most efficient of ways or ultimately to the best interests of the country as a whole.

Indian Christians and the Communal Award

It is perhaps needless at this late hour to state that, from the very beginning, the Indian Christian Protestants were against the

communal award. As is well-known, the communal award was made in August, 1932 and yet, long before that date, the Indian Christian Protestants had been opposing it. As I am penning these lines, I have before me the proceedings of the All-India Conference of Indian Christians which met at Lucknow on 27th December, 1922. The Chairman of the Reception Committee, the Rev. (now the Right Rev. Bishop) J. R. Chitamber said: "Even if we get it (communal representation) in the various boards, councils and assemblies, what can we do against the overwhelming majority unless we enlist their sympathy through co-operation ?" In the presidential speech it was stated that communal representation is "detrimental to national solidarity and progress." The following resolution was unanimously adopted:—

"The Conference views with alarm the increasing bitterness of intercommunal jealousy in India and believing that the principle of communal representation, specially when based on communal electorates in the council and local bodies, is contributive of its prolongation, recommends to the Government the discontinuance of communal representation, if possible, and communal electorrtes at any rate"

Since then we have travelled far. All our great leaders such as the late K. T. Paul, Dr. S. K. Datta, and Mr. P. Chenchiah have opposed it. This fact is so well-known that the Rev. P. O. Philip, who wrote a brochure entitled "The Christian Church and Social and Economic Action in India" for the Tambaram meeting of the International Missionary Society, says that the communal award with its separate electorates was thrust on us. I was merely voicing the opinion of the far-sighted among us when I pleaded for the giving up by our community of the system of separate electorates. At about the same time that I was putting forward this opinion before our community in Madras, Prof. A. Soares, in his presidential address at the All-India Catholic Congress held at Mangalore late in December last year, was saying the same thing. Since that time, our Catholic brethren have reiterated identical views in that most influential of their South Indian organs, *The New Leader*. It thus follows that Indian Christians, whether Protestant or Catholic, are now united in their condemnation of the communal award.

The official position of the All-India Indian Christian Conference, of which I have the honour to be President for the current year, may be stated as follows:—

(1) In principle we are against communal representation in any form and we would always therefore be influenced on the side of such forces as work towards its abolition.

(2) In case communal representation by reservation of seats through general electorates is accepted by major communities as a compromise, we shall gladly support this view.

(3) If separate electorates, however, are insisted upon and introduced, we expect that the claims of our community should be recognised.

Granting for the sake of argument that here and there the Indian Christians are or have been treated badly on account of their numerical weakness, I would still exhort my brothers and sisters in faith not to pin their faith for safeguarding their interests on communal representation but on the goodwill of their more powerful brothers in blood. It would be a tragedy if the slightest breath of persecution due to political causes is sufficient to make us desert these principles leading to All-India unity which were formulated and practised by our forbears. To even think of doing so can be explained in one or other of two ways only. The explanation which would suggest itself most readily would be that we are ignorant of the past political history of our community and, therefore, have no love for the traditions built up by our old leaders. Another explanation may be that we are so weak and helpless under any kind of political persecution that we are prepared to sacrifice principles to expediency. Carried to its logical conclusion, such an attitude cannot but lead one to think that we would be prepared even to abjure our faith under sufficient persecution. Let us remember how many Indian Christians of North India suffered martyrdom for their religion in the days of the Indian Mutiny, and with their glorious example before us, let us endure patiently till more favourable times come. A third explanation may be that selfishness has become so ingrained in us that we are prepared to sacrifice principles without any hesitation for the sake of some temporary, and, may be, personal advantages. Let all of us who try to faithfully follow the Lord and Master decide for ourselves and for our community whether this is the ideal we are prepared to place before our poorer and less educated brothers and sisters. If we do not wish to go back on our old traditions, we have to continue our protest against the communal award till it is abolished.

The Effects of the Communal Award

In conclusion let us try to sum up the effects of the communal award on India. This most objectionable of measures, if retained permanently, is bound to have the following mischievous consequences. As the result of the disruption in our political life which must follow disintegration among the different religious and social groups, it may indefinitely prolong our political servitude to the British Government. The presence of the British Government will be absolutely necessary in order to preserve an even balance between the rival claims of contending groups. These must always depend on the British Government to maintain peace and order whenever clashes are apprehended between conflicting groups. This again will have the effect of perpetuating our economic servitude. In the absence of unity in the political field, we shall experience almost insurmountable difficulty in evolving a common economic policy calculated to turn India into a self-sufficient country. Selfishness and greed which, as the result of the working of this principle, will be at a premium, will tend to retard social progress, specially when the legislation aimed at the amelioration of backward groups will imply the taxation of other selfish groups. Lastly, with every group becoming communally-minded, there will be a constant struggle between the groups for as large a share as possible of immediate advantages and so their fusion into a united Indian nation may be indefinitely postponed. We shall thus have a practical demonstration of the law of the survival of the fittest but the fittest in this case will be not the most but the least patriotic, not the least but the most selfish, and our country will never know the meaning of peace or amity either in public or private life. All these disadvantages of the communal award were realised when an Indian State like Hyderabad, in the reforms announced on the 20th July this year, refused to allow the elected representatives to be sent to its legislature on the system of communal electorates and substituted for it the system of joint electorates.

The Remedy

Ramsay Macdonald wrote that "the scheme is a fair and honest attempt to hold the balance even between conflicting claims." He

appealed to all concerned to regard it as an endeavour "to remove a serious obstacle from the path of constitutional advance." It was also stated at that time that "Government were prepared to accept any better scheme to which all the parties concerned might later give their full concurrence but they made it clear that they would not listen to any sectional representations."

I have very briefly referred to the kind of national disintegration for which I hold the communal award responsible. I am of course aware that the real trouble lies deeper and that this conflict is really due to the selfishness innate in sinful humanity. None the less it is equally true that this innate selfishness of man has found an easy method of expressing itself through the communal award with its infinite capacities for mischief. I have no illusions about a universal and a radical change of heart. I do not believe that there is much likelihood at present that all the different religious and social groups will come to a mutual agreement and present something like a joint petition to Parliament for the abolition of the communal award. On the other hand, it is only too likely that selfishness will filter downwards and that further social, economic and religious groups will put in their claims for a share in the good things of life. I only hope that this process will go on till it reaches such proportions as to make every Indian realise wherein his true interests lie. Then and then only will there be any likelihood of our coming to a common agreement and making our demand to the British Parliament.

I am aware that this attitude is characteristic of the pessimism of age but I would most gladly be called a false prophet if only I was certain that a less painful and quicker way out of this most difficult of situations could be found. And this solution of the problem has been offered by Margaret Barns. This lady reported in London on the three Round Table Conferences after which she came to India. Here she spent ten years in journalistic work and enjoyed exceptional opportunities of familiarising herself with Indian conditions. According to her, all political problems are really economic problems and, as such, unity among the different social and religious groups is inevitable. After her return to London she wrote a book entitled "India To day and To-morrow" from which the following lines are taken:—

"The problem of hunger is the same whether a man is a Hindu, Mohammadan, or Sikh. The struggle for existence is just as keen if he is a Christian or an Anglo-Indian.....Consider for one moment

the type of legislation which is likely to engage the attention of the legislatures. Whether it affects the maintenance of law and order, social conditions, fiscal policy, education, taxation, unemployment—it will affect the electorate as citizens and not as adherents of this or that religion. In spite of separate communal electorates, there is no insuperable obstacle standing in the way of formation of political parties on economic bases."

Let every patriotic Indian pray incessantly to the God of Nations that He might in His mercy take pity on His unhappy children in India and give us sufficient political wisdom and sufficient unselfish love of our motherland to enable us to live in peace and harmony with our brothers in blood even though they might not be our brothers in faith.

KANT AND THE MODERN MIND

HUMAYUN Z. A. KABIR

MORE than two thousand years ago, Plato defined philosophy as "the criticism of its own presuppositions," and the experience of mankind has not, in the intervening two thousand years, made any appreciable advance upon the definition offered by him. For Plato's definition goes to the heart of the matter in refusing to admit that there is anything given or sacrosanct in philosophy. Unlike the special sciences which recognise the distinction between premises and conclusions, between postulates and criteria, philosophy takes within its survey all things that can in any way be regarded as objects of our experience. Its aim is, therefore, to seek for a viewpoint from which all aspects of our existing experience may, as far as possible, appear consistent with one another. From this it would at once follow that every man must have a philosophy of some sort in so far as he attempts to act consistently or rationally, and since no two men agree about the meaning of consistency or rationality, it would also follow that no two persons can have exactly the same philosophy. This is the meaning of Kant's famous dictum when he insists that "no one can teach us philosophy: one can only teach how to philosophise."

This principle of Kant at once strikes the keynote of the modern age. For the modern age may be regarded as essentially the age of science. This is true not only in respect of the achievements of science and its application to the practical problems of life, but also with regard to the temper and outlook of the age, and this mentality is even more important than the new science and the new technology. If we take isolated inventions of science, it is not unlikely that past ages may point to many instances of single inventions which compare well with any of its modern conquests, but if we, to use Dr. Whitehead's phrase, talk of the climate of thought of different ages, the difference between the modern age and all past ages becomes unmistakably clear.

This may be expressed in another way by saying that science was for earlier ages only one among the activities of the human mind.

Morality, religion and art are other such activities, and both co-operate and compete with science to frame for man his picture of the universe. But in every age, some one of these activities is the dominant interest of the human mind. This does not mean that it is the exclusive preoccupation of the age, but it does mean that the mentality of the age is tinged with the colouring of its imaginative background. Thus, an age in which morality is the supreme interest of the human mind will be characterised by intensity and earnestness, not only in its explicit moral behaviour, but also in the scientific, religious and æsthetic endeavours of the times. In a similar manner, science is today not only the primary interest of the age, but it also colours and influences the morality, the religion and the art of the epoch. If philosophy be the attempt to harmonise the different aspects of human experience, it would follow that philosophy must reflect the peculiar balance of science, morality, religion and art which obtains in any particular age. The change in the dominant interest of a period must, therefore, make a change in the imaginative background which colours its philosophy and this is what has actually happened. The rise of science in the modern world has altered the metaphysical presuppositions and the imaginative content of our minds.

This scientific temper of the modern age may be briefly described as "a vehement and passionate interest in the relation of general principles to irreducible and stubborn facts. All the world over and at all times there have been practical men, absorbed in 'irreducible and stubborn facts': all the world over and at all times there have been men of philosophic temperament who have been absorbed in the weaving of general principles. It is this union of passionate interest in the detailed facts with equal devotion to abstract generalisation which forms the novelty in our present society," and it is largely a contribution of Kant to the make-up of the modern mind.

A very brief survey of European philosophy before Kant will convince us of the truth of this saying. In the rationalist's interpretation of the universe, very little room was left for paying any attention to the individual and stubborn facts. Starting with Cartesian dualism, which inconsistently enough tried to account for the irreducible and stubborn facts of experience through the continuous intervention of an all-powerful deity, it developed into the geometricism of

Spinoza in which the particulars are mere functions of the nature of the absolute, while with Leibnitz, the attempt to maintain the independence of the individual and explain experience in terms of procedures of organisation was frustrated by the all-pervasive operations of the law of pre-established harmony. Thus, the rationalist's passionate interest in general principles was achieved only at the cost of sacrificing stubborn and irreducible facts of experience. The empiricists on the other hand started with the appeal to experience and refused to accept anything as valid that did not stand the test of conformity to stubborn and irreducible facts. The reaction against mere rationalism which began with Locke expressed itself in a constant and increasing appeal to facts, but the result was that in this preoccupation with brute facts as such, the human mind lost sight of the general principles which alone make these facts intelligible. Locke with his glorious inconsistency does not clearly reveal this gradual falsification of experience, for he somehow kept the unity and uniformity of nature inspite of the demands of his starting point. Berkeley was more consistent to Locke's principles than Locke himself and denied that we have the right to infer the existence of a physical universe which is outside and independent of the brute facts revealed to us in our sentient experience. Hume worked out the logical implications of the position and pointed out that the existence of a self-existent physical world and an equally self-existent spiritual world are not facts given to us by our experience. All that we really experience consists of sensations, some of which for some unknown reason are associated together in coherent successions and we call them mind, while others are associated in certain characteristic ways which physical science describes. Thus the empiricist's passionate interest in stubborn and irreducible facts is achieved only at the cost of sacrificing the rationality and coherence of the facts of experience.

Thus both rationalism and empiricism had failed to give any intelligible account of the scientific temper and it was left to Kant to frame the philosophical outlook of the modern age in his conception of synthetic *a priori* judgment. Here it is not necessary for us to enter into a detailed analysis of this philosophical concept. It is sufficient to indicate that in this formulation the passionate interest in detailed facts is reconciled to an equal devotion to abstract generalisation. In fact, it is not accurate to describe Kant's achievement as

a reconciliation of abstract principles with irreducible facts, for that suggests that there could be a conflict between the two, whereas the real point of Kant's philosophy is the recognition that abstract principles and stubborn facts have no meaning apart from one another. On the one hand, all the data of our perception of physical phenomena embody relationship to other phenomena, and on the other hand, these relationships have no meaning or existence apart from the phenomena in which they are exhibited. An isolated brute or stubborn fact is, therefore, merely an empty product of the imagination, while the general law or abstract generalisation is merely the relationship inherent in what is perceived.

For Kant, therefore, the perceived physical universe was no longer a universe independent of perception of it. It was a universe to which the relationships that are present in perception, and, therefore, belong to mind, give it form and thus enter into its constitution. We interpret and perceive it as a physical universe because mind is so constituted that we cannot interpret and perceive it otherwise. With this admission of the relativity of the world of experience to the human mind, the immensities of absolute time and absolute space become meaningless, for space and time are themselves seen to be in some sense manifestations of the mind. This recognition that forms of perception and categories are the relationships that determine the structure of the perceived universe is of the greatest importance for the understanding of the modern outlook on life. For one thing, it explains the subjectivism of modern philosophy, and one may add, modern science. Nor is its influence confined to the fields of speculative thought, for it has penetrated into the regions of the practical affairs of life.

The outstanding concern of modern philosophy is that of the problem and theory of knowledge. This epistemological bias is a direct outcome of the Kantian tradition in philosophy. Even more than that, it is a revelation of the importance of the subjective point of view in the modern world. The pre-Kantian world was preoccupied with the problem of the relation of body to mind and started with the absolute existence of both. The central problem of modern philosophy is the study of mind, considered from two distinct but related points of view. On the one hand, we have psychology or the study of mental functionings as considered in themselves and their mutual relations. On the other hand, we have epistemology or the theory of the

knowledge of a common objective world. In either case, it is the subject of experience that holds the centre of the stage.

In modern science also, we may trace the application and development of the Kantian relativity. For Kant, the physical universe is essentially a unified universe, and the concept of mutual relations or interdependence is basic to its very structure. He, therefore, thought of space and time, not as absolute entities, but as forms of perception or relationships inherent in the nature of the world perceived. In the hands of Einstein and other modern physicists, the principle of relativity was still further extended and applied in far greater detail than Kant had ever done. Kant had shown that there is no meaning in absolute motion or absolute rest, and Einstein pointed out that absolute flow of time or simultaneity is just as meaningless. Further, Einstein's discoveries showed more clearly than Kant had done that the forms of perception and the categories are not separable from one another, but imply and must imply one another. In Kant himself we find the suggestion that space and time cannot be understood in isolation from one another, though in Kant there is no explicit recognition that space and time form an indissoluble unity.

It only remains to notice the implications of Kantian relativity in the field of practical affairs. The subjectivism of the modern mind is directly related to the democratic temper of the age, for subjectivism must necessarily lead to an appreciation of the importance of the individual. We are not here concerned with the particular forms of government in vogue today, but the political mentality of the age, inspite of occasional and perhaps apparent variations here and there, is based upon the conception of the primary rights of man and the demand of the freedom of thought of all members of society. Side by side with this, we have a new emphasis upon the conception of society as an organic unity, in which the functions of the individual shall be controlled in the interests of the social whole. At first sight this appears somewhat paradoxical, for how are we to reconcile the demand of subjectivism with its emphasis upon the importance of the individual with the concept of the social good in which the individual is considered merely as an instrument in the furtherance of the social purpose? The invasion of the state or corporate society into the precincts of experience till now considered sacred to the individual seems incompatible with the claim of the individual implied by the

relativity of a subjective metaphysic. But here also the influence of the Kantian mentality reveals itself, for we may, from one point of view, regard it as the problem of synthetic *a priori* judgment in the field of political affairs. Kant faced the problem and tried to solve it in his conception of art in which unique individuality is reconciled with conformity to universal modes of human emotions. Society must also present the same unity of the individual and the universal, of the stubborn particular and the abstract form. Our problem of reconciling the democratic urge for individual liberty with the socialistic demand for universal equality is, therefore, a heritage of the Kantian outlook and our solution must also follow the general lines indicated in his conception of art.

THE ATLANTIC CABLE *

E. D. JOHNSON
The Indian Cable Company, Ltd., Tatanagar

IN these days of rapid speech transmission over vast distances and considering the fact that thousands of us in India followed the recent tour of the King and Queen through North America, listening to speeches they made, listening to the welcomes they received at the same time as people within sight of their Majesties could also listen, it seems a long time ago to the days when it took nine days for a simple message to be conveyed from London to New York. Actually it is not yet 81 years since the first electrical signal was transmitted by electrical cable across the Atlantic Ocean from Valentia in Ireland to Trinity Bay in Newfoundland. This auspicious event took place on 5th August, 1858, the Chief Engineer responsible for the laying and landing of the cable being Mr. C. T. Bright, then aged 26 years, who was made a Knight within a few days of the landing, being the youngest man ever to receive that distinction.

The first submarine cable was visualised by a Spaniard named Salva in 1795 and in 1811 two engineers carried out experiments with a soluble material—most probably rubber—for insulating the wire, the problem of an ocean cable being the insulation of the wire. Telegraphy on land was already an established fact, mostly by the railways, the electrical signal being conveyed by a bare conductor insulated much in the same way as an overhead line is today by porcelain insulators on wooden poles. The only wire insulation then known was cotton wrapping which could not be used under water. It is interesting to Bengal to know that the earliest records of practical telegraphy under water appear to indicate that the River Hooghly in 1838 was the first victim of man's progress in this direction. Dr. O' Shaughnessy (afterwards Sir William O'Shaughnessy Brooke, F. R. S.) laid a submarine cable across the River Hooghly in 1838 on behalf of the East India Co. His cable, to use his own words, was constructed as follows:—

"Insulation, according to my experiments, is best accomplished by enclosing the wire, previously pitched, in a spirit rattan and then plying

* Lecture at Rotary Club, Calcutta, July 18, 1939.

the rattan round with tarred rope, or the wire may be surrounded by strands of tarred rope and this by pitched yarn. An Insulated rope of this kind may be spread across a wet field—nay even led through a river—and will conduct the electrical signals without any appreciable loss."

From this small start progress was not rapid. The next submarine cable we hear of was across New York harbour in 1842. In 1845 a cable was laid across the Hudson River to connect Fort Lee with New York. The cable was 12 miles long, worked well for several months and was ultimately broken by ice. Experiments in Kiel Harbour followed and in 1849 a conductor insulated with gutta-percha and 2 miles in length was laid in the English Channel.

The first submarine cable to connect two countries was that laid across the English Channel between England and France in 1849. That cable only lived to speak very few more or less incoherent words, one being a short message to Louis Napolean Bonaparte, afterwards Emperor of France. It subsequently transpired that a Boulogne fisherman had hooked up the line with his trawl, mistaking it for a new kind of seaweed.

The financing of submarine cable experiments was a very difficult matter. Both the cable and the task of laying were expensive and the necessary sanctions were even more troublesome. Although the first cable across the Channel was not a striking success it proved the possibility and ultimately sufficient capital was raised to lay in 1850 to 1851 a cable that was so constructed as to be a lasting success and in spite of extensive repairs and splices over a period of years, this cable worked successfully for more than 50 years.

The work of these early pioneers proceeded, England was linked to Ireland, Scotland to Ireland, England to Holland, England to Germany, Denmark and Sweden. The Mediterranean was bridged by the cable engineer and then these early engineers aspired to close the gap of the Atlantic Ocean.

The immense step forward between laying cables across narrow seas and across 2,000 miles of the Atlantic Ocean was appreciated by those associated with electric telegraphy on both sides of the Atlantic. The greatest length of cable previously made had been 110 miles and the greatest sea depth encountered had been 300 fathoms. A survey of the Atlantic had shown that a plateau extended on the ocean bed for almost the entire distance between Ireland and America. The

depths averaged 2½ miles (2,200 fathoms) shoaling rapidly on the Newfoundland side and still more rapidly on the Irish side. An oozy bottom, entirely suitable for submarine cable laying, was found throughout.

New York had been joined up by telegraph to St. John's Newfoundland in 1856 by land line to Cape Breton on the North coast of Nova Scotia, submarine cable to Newfoundland across the gulf of St. Lawrence and land line across Newfoundland. On the European side Ireland had been connected to London and in 1856, armed with concessions to land a submarine cable at all the possible spots on British North American territory, an American named Cyrus West Field arrived in London, to attempt to found a Company to lay and work an Atlantic telegraph cable. Field was purely a businessman with no knowledge of the technical side of cable laying. On September 26, 1856, an agreement was entered into between Field, an English businessman named John Watkins Brett and an engineer, Charles Tilson Bright, to form a Company to establish the working of an electric telegraph between Newfoundland and Ireland. The Company was to be called The Atlantic Telegraph Co. Like all pioneers they had a stupendous task ahead of them. A cable had been designed that had been found capable of being laid and worked on the ocean bed Experiments made by Bright and Whitehouse had proved that signals could be transmitted over a distance of 2,000 miles. Soundings of the Atlantic Ocean were generally favourable except for the depth being so very much greater than ever previously encountered. Favourable landing rights were already granted and the Government on both sides recognised the practical value of the scheme. Pecuniary support was easily found, the necessary capital of £350,000 was raised within a few days, mostly by the cities of Liverpool, Glasgow and Manchester. There were only two real problems in the entire proposition, firstly the manufacture of such a large length of cable and secondly the provision of a suitable ship and the necessary apparatus for laying it. These happened to be rather serious problems.

Nowadays an electrical cable is entirely manufactured in a cable factory from the basic raw materials. In spite of the large variety of raw materials in electrical cable construction and the many types of operations, they all proceed under one roof or adjacent series of roofs. Eighty years ago a cable factory was a very tiny place. It was only capable of manufacturing the smallest of cables and quite incapable of providing the necessary external mechanical protection.

The order for what is termed the 'core' was given to the Gutta-Percha Co. of London and they manufactured and jointed up into two lengths a total of 2,500 nautical miles of a copper strand consisting of 7 wires insulated with three coatings of gutta-percha to a total overall diameter of $\frac{3}{8}$ inch. This was a greater thickness of insulation than had previously been employed but it was appreciated that the enormous pressure that would be experienced at the great depths to be encountered would be a severe test on the core. We know now that the conductor size was much too small and a still greater thickness of insulation was necessary. Apart from these two features a submarine telegraph cable made today would be almost identical with the original Atlantic cable. Copper still forms the conductor and gutta-percha the insulation. The serving and the external mechanical protection of today with iron or steel wires are still the standard. Actually Bright was very anxious to have a conductor 250% heavier and with still thicker insulation. That would have been considerable departure from standard practice in those days but would closely agree with present day standards. The business side of the directorate, for reasons of economy and also to ensure an early completion of the cable to allow for laying during the summer of 1857, overcame the wishes of the Chief Engineer. The business-like manner and the speed with which this proposition was entered into can be admired. It certainly compares favourably with some experiences of the present day for example the Howrah Bridge. At the same time it is rather a pity that more consideration was not given to such an important item as the dimensions of the core.

After the insulation of the core this was handed over to the pit rope makers for the application of an external mechanical sheathing. First of all the core was surrounded with a serving of hemp impregnated with a mixture of tar, pitch, linseed oil and wax. This served as a bedding for an armouring of iron wires which in the case of the main Atlantic cable consisted of 18 strands each composed of 7 wires having a diameter of 0·028″. The cable was then finally drawn through another mixture of tar. In the case of the shore ends, for 15 miles at the western end and 10 miles at the eastern end, the armouring consisted of 12 wires each having a diameter of 0·324.″ At the shore end the abundance of rocks and the effect of tides made it essential to have greater mechanical protection. The contract price for the entire cable was £225,000, the core costing £40 and the armouring £50 per mile.

When it came to the question of laying there was much rather amusing controversy. Technicians could not decide whether the cable would really sink to the bottom of the ocean. The Astronomer Royal of that time announced to the world that it was a mathematical impossibility to submerge a cable in safety at so great a depth and that even if it was possible, no signals could be transmitted through so great a length. The general fallacy seemed to be that that the pressure of the water would become so great when the cable had sunk say one mile or more, that the cable would stay in partial suspension and because of sea movement would be so strained that it would ultimately break. Even some distinguished naval men held this strange view. In view of this supposed difficulty it was quite seriously proposed to festoon the cable across the ocean at a given maximum depth between buoys and floats at which ships might halt, hook on and talk telegraphically with the shore. There were thousands of inventors, all with weird ideas. One man took out a patent to convert the largest possible ship available into an enormous floating factory with a view to manufacturing the cable on board in one continuous length and submerging it over the stern like a string of sausages.

Cable manufacture proceeded at an amazing speedy rate and as fast as the cable was made it was coiled into iron tanks ready for shipment. The arrangements with American interests were rather unfortunate because they entailed the laying of the cable by a specific date and left little time for the manufacture of the cable, the selection and the preparation of the ships and the manufacture of the paying-out gear. This being the first ocean cable, special apparatus had to be designed for the paying-out gear. Due to haste this gear was not well designed and gave trouble during laying. There were no special cable ships in those days. The Governments of Britain and the United States of America had promised their support and this took the form of two battleships, the H. M. S. "Agamemnon" and the U. S. frigate "Niagara" both screw propelled vessels, the latter the finest ship of the U. S. Navy. An escort of one U. S. ship and two British was provided, the whole being termed the "Wire Squadron."

For the first three weeks of July, 1857, the two vessels coiled the cable on board, the "Agamemnon" in the Thames and the "Niagara" in the Mersey and the two vessels met at Queenstown on 30th July. In the harbour at Queenstown an opportunity was taken to connect the two vessels together with a length of cable while they were

moored ¾ mile apart, and the entire length of 2,500 nautical miles was tested and worked throughout. The results were entirely satisfactory and the "Wire Squadron" set sail for Valentia Bay on Monday, August 3, 1857.

Bright as Chief Engineer wanted to start laying from Mid-Atlantic. His idea was to proceed there, wait for suitable weather for the splice and then the ships proceeded independently east and west respectively. This would have halved the laying time thereby reducing the chances of bad weather. The electricians, however, made much of the importance of being in continuous contact with the shore during laying operations. This latter proposition also appealed to the Board as they could then be kept in continual touch with progress. It was therefore arranged for the "Niagara" to start from the Irish coast and the "Agamemnon" to start, after splicing, from mid-Atlantic. On 5th August it took an entire day to land the shore end weighing 10 tons per mile. American officers and men landed the cable, handing it over to the Lord-Lieutenant acting on behalf of the Queen. This was intended as a compliment to America, it being proposed that the British Officers and men should make a similar presentation to the President of the Great Republic.

Early next day the ships got underway at a very early hour, paying-out commencing from the forepart of the "Niagara." Men were stationed along the entire length of deck to ensure that the cable reached the stern safely. The paying-out gear did not take kindly to the work, groaning continuously. After only 5 miles had been laid the cable caught in the machinery and parted. The ship put back, the cable was under-run for the entire distance, raised and spliced. This was a long and tedious task and when completed the speed of progress was reduced to 2 miles per hour for greater safety. This was continued throughout the night but as all went well it was inincreased next day to a rate of 4 and 5 knots.

On Monday, 10th July, they were over 200 miles out to sea and signals were being continuously maintained with the shore. By now they had reached depths of 2,000 fathoms. All went well until 3-45 p. m. on Tuseday, the 11th by which time 380 miles of cable had been laid. Bright had almost continually attended to the brakes of the paying-out gear himself and on that afternoon he had temporarily left them in charge of a mechanic. Before he had reached the forepart of the ship he heard the machines stop, he immediately called out

but before he could return to the machines, the cable broke. All this was caused by the brake control hand wheel having been turned the wrong way.

The loss of 380 miles of cable left insufficient to complete the task so all the vessels returned to Plymouth. In those days it was impossible to pick up cable from the sea bed at 2,000 fathoms. The cable was unloaded from both vessels into tanks at Plymouth because the vessels could not be spared by their respective Governments until the following year. A small paddle steamer proceeded to Valentia, succeeded in reclaiming 50 miles of the deep sea cable and buoyed the end of the shore cable ready for splicing next year. This adventure had cost the Company a total of £100,000.

Further capital was raised, a further 700 miles of cable was ordered and the paying-out gear entirely changed. A dynamometer was also introduced for indicating and controlling the strain on the cable. A more important step was an experimental expedition to enable all operations such as splicing, buoying, picking up in deep water, etc., to be thoroughly rehearsed. It was also agreed this time to start laying from mid-Atlantic.

By the end of May, 1858, the same two battleships were again loaded with their share of the cable and they set sail for their task. On the way they encountered a very severe storm which caused considerable damage to the "Agamemnon" including the shifting of the upper part of the main cable coil into a hopeless tangle which took several days to straighten out. On the morning of the 26th June the splice between the two cables was made, a bent sixpence put it for luck and it was slowly lowered over the side and disappeared for ever. After 3 miles the cable parted on the "Niagara," once again in the paying-out machine, being known at once the vessels put back, another splice was made and they set off again. Speed started at 2 miles per hour again increasing later to 4 miles. On 27th June another break occurred on the ocean bed and when the "Agamemnon" stopped to attempt to test the cable to ascertain the distance away of the break, the cable parted again a few fathoms below the stern wheel. Both vessels put back again and by this time even the most enthusiastic of the engineers must have begun to doubt their ability over to lay this cable successfully.

This time it was agreed, after the splice had been made, that if the ships had each proceeded less than 100 miles when any break or

fault occurred they would again return to each other. Should 100 miles have been exceeded they were both to return separately to Queenstown. On 29th June, late at night when it came to change over on the "Agamemnon" from the upper deck coil to the main hold coil, the cable broke again when the "Agamemnon" was 114 miles from their last splice. As the agreed distance had only been exceeded by 14 miles and as both vessels had still sufficient cable on board it was decided to return for still another splice. Unfortunately the "Niagara" had adhered strict to the agreement and could not be found and at 8 P.M. on 6th July the "Agamemnon" set out for Queenstown carrying aboard her some very disappointed men.

Coal and supplies were taken on board and on 17th July, 1858, the "Wire Squadron" again sailed on their task. This time with very little enthusiasm. Everyone ashore, including most of the Board, looked upon the venture as a mad freak of stubborn ignorance. The departure was without notice from the shore or vessels anchored in the harbour.

At just after noon on 29th July another splice was made in mid-Atlantic and the cable continued to be paid out over the stern of each vessel. This time both halves of the cable were laid successfully and on the 5th August, 1858, both ships arrived at their destinations and advised each other by signals that they were preparing to land their cable. The shore ends were duly landed, connected to their respective telegraph houses and that day messages flashed between the old and the new worlds.

There followed a period of congratulations and festive occasions and then the Company settled down to use the cable commercially. It was found that the insulation of the cable had improved by submersion, this being due to what is known technically as a steep temperature co-efficient which is a characteristic of gutta percha. The low temperatures of the ocean bed gave the insulation a higher value. Unfortunately, Mr. Whitehouse was not content to continue operating the cable with a voltage of just over a 100. He installed enormous induction coils five feet long, producing a potential estimated at about 2,000 volts. For about a week he attempted to use this apparatus, even increasing the potential without avail. He then returned to the original Daniell Cells and reflecting galvanometers and communications were resumed. Messages continued to be transmitted,

mostly greetings and congratulatory sentiments exchanged between the two Governments and their rulers. The first public news message was the report of the collision between two Cunard mail steamers, the "EUROPA" and the "ARABIC." It was found however that the insulation was gradually failing. The 2,000 volts of Mr. Whitehouse had been too much for it and on 20th October it "breathed it's last," having transmitted 732 messages in three months.

That cable, laid successfully, was not sufficiently large for the task. At the same time, had a high potential not been used, it would have continued to work, though slowly for a number of years. To use mechanical analogy, the failure was due to high pressure steam having been produced in a low pressure boiler.

The value of a cable across the Atlantic and the ability to lay it had been proved. It took some years to again collect the necessary capital but in those years cables were laid elsewhere including Suez *via* Aden to Karachi and much useful knowledge collected. In 1865 laying started again. This time from one vessel only, starting from the Irish side. This vessel was the famous "Great Eastern" a magnificent ship of 22,500 tons about 40 years ahead of her time. The shore end was landed late in July and a bad start was made, a fault occurring after only 84 miles of the cable was laid. Faults also occurred at 716 miles and at 1,186 miles. All were due to iron armouring wires puncturing the insulation and on repairing the third fault the cable parted and sank. The depth was 2,000 fathoms and in attempting to recover the cable all rope on board was lost and the "Great Eastern" returned to port.

The following year, with new cable, amended paying-out gear and a large store of grappling ropes the "Great Eastern" set sail again. Fourteen days after starting the cable was safely landed. During the same year the "Great Eastern" recovered the broken end of the 1865 cable, spliced another length to it and by the end of 1866 there were two cables across the Atlantic. A magnificent achievement. These two cables worked slowly at first but as apparatus at each end was improved the speed rose to 8 words and later to even 17 words per minute. With repairs, these cables continued to function for many years. Other cables followed until by the end of 19th century there were a total of 15 cables across the north Atlantic from U.S.A. and Canada to Europe.

BEAD ORNAMENTS OF ANCIENT INDIA

KALYANKUMAR GANGULI, M.A.

BEADS form a very formidable bulk of the antiquities discovered from all over the ancient sites of the east. The art of making beads is probably one of the earliest technical achievements of man and these elements have continued to remain as a very popular material for the making of ornaments from a very early age.

Chalcolithic sites in India such as Mohenjo-daro and Harappa have yielded a considerable number of beads, the wide variety of material, size, shape and such other characteristics of which affords a very interesting study. Semi-precious stones of different varieties were the main ingredient from which these beads were generally made but beads made of known metals such as gold, silver and copper and cheaper elements like faience and clay are also not rare.

The metals were mostly favoured for the manufacture of small or big globular beads. Other elements have to their credit widely different and curious varieties of shapes including shapes like long barrels, big cylinders, fancy cog wheels or fluted, taper-shaped, etc.

The innumerable variety of beads reflects the artists' wealth of conception. In fact, where stones constituted the bulk of jewellery, the efficiency of the stone-cutter was a natural outcome.

High polish is a quality which distinguishes almost all the beads so found. Each bead, in addition to its surface treatments, is further characterised by the essential perforation through the centre. This quality distinguishes their purpose of use. No actual string composed of these beads could survive, due probably to the fact that only perishable materials such as fibre or cotton threads were used to compose them into strings. These threads have tracelessly decayed in almost all the cases and only in one case, the decayed thread which retained the ornament still in its original state at the time of discovery crumbled to pieces at the first touch.

For these reasons, it has not been possible to ascertain the original shape of any of the strings of which the beads still survive. The

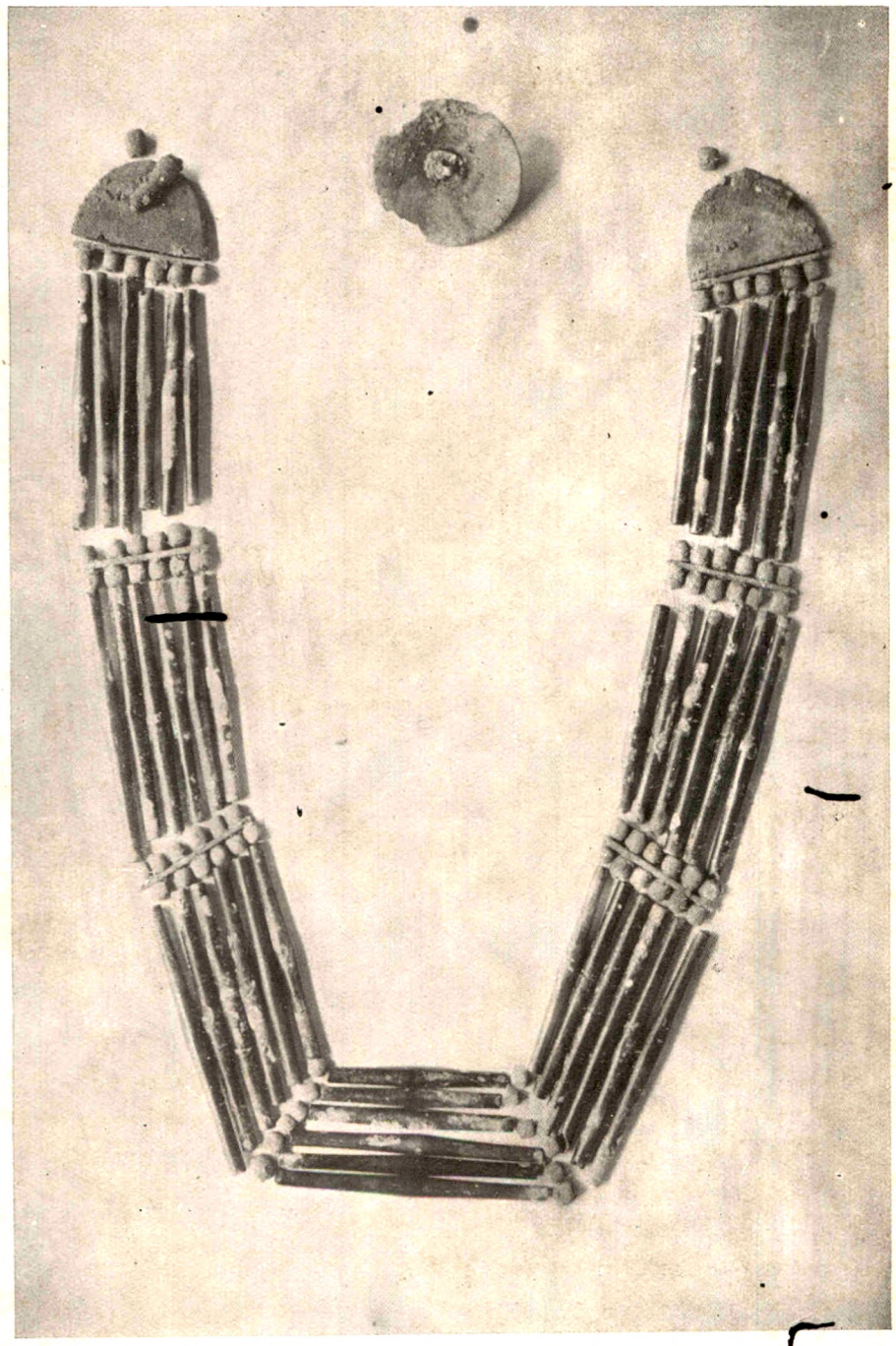

Fig. 1. String of Carnelian beads, Mohenjo-daro.

composition of solitary strings with these beads is however a very simple affair and no possible clue can be found from which it can be determined whether there was any specific rule guiding the composition of such strings. But in almost all finds, heaps of beads have invariably been found hoarded up with a series of two other interesting objects. Of these, one is a semi-circular object made of metal having more than one perforation at its base, all ending in one at its top, the other, usually a perforated strip of metal or stone, flat, rectangular and narrow, equal in length to the base of many of the accompanying semicircular objects. These, as is quite evident, afforded material help towards the composition of ornaments with the accompanying beads (M.I.C., p. 517, and 18, Pl. CXXXIV). The strips having holes through them were evidently used to hold threads at regular intervals and hence are called spacers while the semi-circular objects were used to tuck up the threads at the ends of strings and are known as terminals. It is quite evident that these elements could be used only when more than one string were to be composed in one ornament. The abundance of these objects goes to prove that the use of multi-stringed ornaments of bead were widely popular both in Mohenjo-daro and in Harappa.

A number of these beads, spacers and terminals have been quite ingeniously recomposed into strings by the Archæological Department of India (M. I. C., p. 522, Pl. CXLIX) (Fig. 1). These strings are interesting in so far as they contrive to give an idea of how such strings in their original state used to look. There is no sufficient reason to believe that these terminals or the spacers were ever used for the composition of strings, not more than one in number, and in that case, some of the single string ornaments, recomposed by the department do not afford the correct idea (M. I. C. Pl. CXLIX.) about what they might have been. But most of the other strings are quite all right and some of them, which appear to be very faithfully rearranged afford a very illuminating idea about the skill and efficiency of the craftsmen of the Indus Valley.

Strangely enough, though not at all common in that country, yet a few specimens of almost exactly similar ornaments have been found in an Egyptian grave of the XVIIIth dynasty at Giza (Selim Hassan, Excavations at Giza p. 44. Pl. LXXVIII and LXXIX). Found attached to some skeletons as bracelets, necklaces and anklets, the ornaments composed of more than one string of beads, slightly

flattened hemispherical terminals and zig-zag spacers are in an excellent state of preservation (Fig. 2). The zig-zag spacers are examples of elaboration and never found in India. Moreover, similar type of ornament is not found in Egypt before the XVIIIth dynasty, nor does it recur subsequently, and it does not seem unreasonable to believe that, like many other techniques of art, this technique was imported into that country, never to gain any substantial popularity.

In India, however, use of this type of ornament was quite frequent. It was widely popular all through its phases, at Mohenjodaro and also at Harappa and was most probably used as bracelets, armlets, necklaces, girdles and anklets. But it did not go into disuse with the extinction of the Chalcolithic civilization. Some of the earliest monuments of the historical age have got representations of ornaments strikingly similar to those found in the Indus Valley. Of these, a striking example is the girdle worn by a female figure found at Bodhgaya and belonging to the 1st century B. C. (Cambridge Hist. of India, Pl. XIX, 52). The ornament is composed of three strings of uniform globular beads, spaced at an interval of three beads by flat rectangular spacers. Though the terminals cannot be traced in this case, yet there are representations of similar ornaments shown in Sanchi as dangling ornaments of elephants where the semicircular terminals are also quite explicit. (Fig. 3.) (Maisey—Sanchi and its remains—Pls. XVI and XXI). After Sanchi, however, this type of ornament cannot be traced any more on any of the existing monuments but ornaments which have much in common with those multi-stringed objects are quite frequently seen as worn by women, specially of northern India, even at the present age.

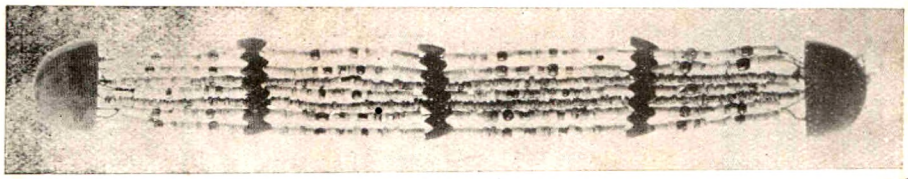

Fig. 2. Bead String from Egypt. Mark the terminals and the zig-zag spacers.

Fig, 3. Elephant on gate way, Sanchi. Mark the dangling string of bead.

PSYCHOLOGICAL STUDIES IN ENGLISH FICTION

SRICHANDRA SEN, M.A.

THE study of psycho-analysis has led to a number of profitless experiments at the hands of mediocre story-tellers. Occasionally their zeal and inefficiency have combined to produce the impression that the psycho-analysts were on a wrong track and that their work did not contribute in any measure to the enlargement of our knowledge and sympathies. But this point of view becomes untenable as soon as we acquaint ourselves with the researches of psychologists and of psycho-analysts, particularly those of Sigmund Freud whose enquiries have secured access to a new world—comprehending all the aspects of the human personality. Freud's most important theories have been formulated to explain the subconscious element in human motives—it is that portion of the mental field whose processes are outside the range of attention. The unconscious psyche is closely associated with the theory of neuroses. When an impulse is prevented from reaching consciousness, it becomes transformed into a neurotic symptom. Freud has expounded many theories to shed light upon the obscure region of the human psyche but it must be asserted that the creed of pan sexuality which he upholds to the horror of the uninitiated has sometimes been very severely criticised. To take an illustration, the theory of Oedipus Complex to which Kempt refers as " the Ark of the Freudian Covenant " has been attacked by McDougall on a number of grounds. These seem also to have occurred to Freud himself and led to a revision of his views.[1]

The most memorable result of these investigations is a changed outlook on human behaviour. Conduct being now regarded as intimately connected with development, its errors are not interpreted as guilt as they were done before the new psychological ideas came into existence, and are now held to be remediable by means of science and treatment. The individual responsibility having thus diminished by discrediting the theory of freedom of will, it has now become possible

[1] William McDougall—An Outline of Abnormal Psychology (Methuen & Co. Ltd.), p. 418.

to study a character in those aspects on which a literary ban was formerly placed for their evil savour.[1] This has led to a considerable extension of the field covered by the Novel.

Having thus far considersd some leading ideas advanced by the science of psycho-analysis, it may be appropriate to refer to a few instances of applied psychology in contemporary Engish fiction illustrating certain types of character and their reaction to external circumstance. To make the study systematic we may start with child psychology and proceed by stages to the adult reacting in subtler and more individual way to different emotions. The child in this century has acquired an importance which it did not possess before and we find authors giving it an increasing importance. It was Wordsworth who said that the child is the father of the man, but it was not then so clearly recognised that the child's effort to arrive at an adjustment in relation to its environment cost it a severe strain[2] and called for the greatest care and attention on the part of its guardians. The hopes, joys, and fears of childhood as well as the child's slow progress towards an adaptation to its environment have been set out at length by many novelists including H. G. Wells, D. H. Lawrence, Somerset Maugham, Virginia Woolf and others. For obvious reasons the child cannot, however, play a leading rôle in a novel as we now understand it. Compton Mackenzie devotes the first hundred and more pages of " Sinster Street " (Vol. I) to a minute study of Michael Fane. The following passage, chosen at random, illustrates the child's belief about the finality of the present state of things and its incapacity to look beyond: "...He (Michael) supposed that one day he would like Stella's (his sister's) playing (she was a musician). One day, so he had been led to suppose, he would also like fat and cabbage and going to bed. At present such a condition of mind was incomprehensible."[3]

Lawrence gives a very close analysis of the little Anna Lensky. Her mother, a widow, married Tom Brangwen. Anna conceived a violent prejudice against him. It was jealousy and her vocabulary was not ample enough to express it with the vividness she desired.

[1] A. C. Ward—Foundations of English Prose (G. Bell & Sons, Ltd.), 1931, p. 82.

[2] The chief achievement in the field of child psychology, to quote Adler, has been our ability "to join the childhood experiences, impressions, and attitudes, so far as we are capable of determining them, with the later phenomena of the soul life, in one incontrovertible and continuous pattern." (Alfred Adler—Understanding the Human Nature, George Allen and Unwin, Ltd., p. 5.)

[3] Compton Mackenzie—Sinster Street, Vol. I (Martin Secker), 1922, p. 91.

But the child can invent when it does not know and this is how she manages to give vent to her feelings:

" We don't live with you," she said, thrusting forward her little head at him, You—you're—you're a bomakle."

" A what? " he shouted.

Her voice trembled—but it came: " A bomakle." [1]

The picture of adolescence is generally of a period of much anxiety and perplexity. It is unhappy because of an unachieved adaptation. Wells sums up its peculiarities in this brief description, " half-man, half-ape, and wholly egoist." [2] Arthur Wilmont in diagonsing the character of Michael Fane makes almost the identical observation: " You are at present a queer sort of mythical animal whom we for want of a better term call ' adolescent.' Intercourse with anything but your own self shocks both you and the world with a sense of extravagance as if a centaur pursued a nymph or fought with a hero."[3] But the adolescent is not incapable of passion and its attachment may prove both genuine and lasting. Ann faded away from the life of Kipps[4] but only to reappear, eclipsing a more recent attachment, and become his wife. Kipps met her as a boy and his feeling revived years after when he craved for some respect and affection having thoroughly tired of the rôle of pupil lover which he had to play in relation to Helen to whom he was affianced. In the case of Michael [5] a very similar thing happened and Lily whom he had met in his adolescence was prevented from becoming his wife when he renewed the friendship at a mature age only by the extreme fickleness of her temper. The outstanding features of adolescent love are the desire of self-immolation and adoration.[6]

The subject of love has exercised the minds of nearly all the novelists, and its subtleties have received the most detailed attention. It will be best to reserve a separate section for their treatment. A few instances of abnormal psychology may here be noticed.

[1] D. H. Lawrence—The Rainbow (The Modern Library, New York), p. 62. The word " bomakle " is of course purely nonsensical and has nothing to do with bom or boma which is a native name in Congo for a huge non-poisonous snake. This fact is clear from Tom's reply made in mock anger. He calls her a " comakle."

[2] H. G. Wells—The World of William Clissold, Vol. II (Ernest Benn, Ltd., 1926), p. 407.

[3] Sinster Street, Vol. I, p. 285.

[4] H. G. Wells—Kipps (Macmillan & Co. Ltd., 1920).

[5] Sinster Street, Vol. I.

[6] H. G. Wells—The Passionate Friends (T. Fisher Unwin, Ltd.), p. 51.

Hermione Roddice[1] who was genuinely in love with Birkin did not feel complete without him and was otherwise aware of a "terrible void, a lack, a deficiency of being within her." She was a woman of the intellectual type and Birkin who did not respond to her mockingly told her when once she insisted on spontaneity in the emotions: "You'd be verily deliberately spontaneous...your deliberate voluntary consciousness. You want it all in that loathsome little skull of yours, that ought to be cracked like a nut." [2] Hermione was humble to him but this jeering attitude hurt and humiliated her until one day a sadistic impulse drove her to attempt on his life. The action might have been characterised as an instance of feminine revenge but the author did not clearly intend it so, as would be seen from the following: " A terrible voluptuous thrill ran down her arms—she was going to know her voluptuous consummation. Her arms quivered and were strong, immeasurably and irresistibly strong. What delight, what delight in strength, what delirium of pleasure ! She was going to have her consummation of voluptuous ecstasy at last. It was coming ! In utmost terror and agony, she knew it was upon her now, in extremity of bliss. Her hand closed on a blue, beautiful ball of lapis lazuli that stood on her desk for a paper-weight. She rolled it round in her hand as she rose silently. Her heart was a pure flame in her breast, she was purely unconscious in ecstasy. She moved towards him and stood behind him for a moment in ecstasy. He, closed within the spell, remained motionless and unconscious.

" Then swiftly in a flame that drenched down her body like fluid lightning and gave her a perfect, unutterable consummation, unutterable satisfaction, she brought down the ball of jewel stone with all her force, crash on his head."[3]

We learn, however, that the blow was not fatal as her fingers were in the way and deadened it. But the description leaves no doubt regarding what Lawrence meant to portray.

Another abnormal character in the same story is Gudrun. She was teacher in a school and possessed all the mental discipline education could confer, wedded to an intelligence that was naturally quick and alert. She felt herself drawn to Gerald Crich depicted

[1] D. H. Lawrence—Women in Love (Martin Secker), p. 17.

[2] *Ibid.*, p. 44. Masochism or a rage of abject passion passively submitting to brutalities is another instance of abnormal psychology. Writing of this tendency Havelock Ellis says: " Such a state of feeling is by some regarded as almost normal in women." (Psychology of Sex, Vol. II : Sexual Inversion, p. 100).

[3] *Ibid.*, p. 108.

as a man of powerful build, full of energy, possessing a capacity for organisation and ruling masterly instinct with a breeziness of temper born of outdoor habits. He was the accidental murderer of a brother and the author suggests that this accident was related to character. Gudrun began to take an interest in him which amounted to a strong partiality the moment she saw him. But the manifestation of love took an unusual form in her, as would be evidenced by the following passage: " And she (Gudrun) felt in her soul an unconquerable desire for deep violence against him (Gerald Crich). She shut off the fear and dismay that filled her conscious mind. He recoiled from the slight blow on his face." [1]

Spandrell[2] deliberately practised vice to spite himself, to spite his mother, and to spite God, after his mother's second marriage. " He hoped there was a hell for him to go and regretted his inability to believe in its existence." He found vice exciting in the beginning but habit soon converted it into a dull necessity and he " turned with a kind of desperation to the refinements of vice." At last he murdered Everard Webley, the founder and the head of the Brotherhood of British Freemen, in the quest of wickedness and because the latter somehow humiliated him by the sense of power and majesty he gave forth. Illidge joined him in perpetrating the deed of horror. He was a biologist. Poverty had perverted his vision. The act suggested more than a lurking suspicion of the Inferiorify Complex.

W. Somerset Maugham gives an interesting specimen of psychoanalysis in a story in which he shows how infatuation ends a happy married life which has lasted for sixteen years. Margery and Charlie were both elderly people—the husband was fifty.three and the wife forty-four. They had never lived separately from each ofher after marriage and men laughed harmlessly at their fondness. Gerry Merton, a young man of twenty-nine, came back from Borneo for a heliday and danced with her, the husband not imaginig that this could lead to any serious consequences. The two fell in love in spite of the great discrepancy of age between them—it was maternal and pprotective love on the side of Margery [3] but it broke up the home and ended with the unhappy Charlie's death by an overdose of veronal.

[1] D. H. Lawrence—Women in Love (Martin Secker), p. 177.
[2] Point Counter Point, p. 299 f.
[3] W. Somerset Maugham—The First Person Singular (William Heinemann, 1931), p. 42.

Maugham has, however, refrained from directly suggesting that Margery's commonplace married life made her repress her desire for freshness and romance leading to what psycho-analysts call a complex formation.[1] Writers like Maugham who do not obviously incorporate theories of psycho-analysis in their stories rely upon the reader's acquaintance with the recent ideas on the subject for an adequate appreciation.

The extreme type of introvert who shuns society and lives much by himself may develop misanthropic views but he has no necessary connection with solitary habits and lonely meditation. On the other hand misanthropy is inconsistent with any well-ordered notion of the universe and man's place in it and is a sign of failure and disappointment. The introvert is the possessor of an abnormal psyche[2] and his ideas are important because they show to what introversion may give rise. Lawrence draws the character of Birkin, to whom reference has already been made, as an introvert delighting in solitude and avoiding company. Here are some of his views: "Do you think that creation depends on man: It merely dosen't. There are trees and the grass and birds. I much prefer to think of the lark rising up in the morning upon a humanless world. Man is a mistake, he must go."[3]

Cardan, whom Aldous Huxley represents as an extrovert, living always in the midst of much company, gay, urban, well-informed, loses his self-control and the capacity to concentrate his mind on any subject except that of death and disease when he once finds himself overtaken by night in a marshy place some miles away from Mrs. Aldwinkle's palace where he was then residing. Men of his type are particularly helpless under such a circumstance where no amount of conversational ability will do them any good. He has been thus psycho-analysed: "He wished to God he were back at the palace, with people round him to talk to. Alone, he was without defence. He tried to think of something lively and amusing; indoor sports, for example. But instead of indoor sports he found himself contemplating visions of disease, decrepitude, death. And it was the same when he tried to think of reasonable serious things: what is art, for example?

[1] William McDougall examines two instances of complex formation in "An Outline of Abnormal Psychology," pp. 230-31.

[2] *Ibid.*

[3] D. H. Lawrence—Women in Love, p. 132.

and what was the survival value to a species of eyes or wings or protective colouring in their rudimentary state before they were developed far enough to see, fly or protect.''[1]

Stephen suffers from ' Agenbite of Inwit ' or remorse of conscience for not having obeyed the last wish of his dying mother to kneel down and pray. The death-bed scene constantly recurs to his memory and at night assumes the terrors of a nightmare. " In a dream, silently, she had come to him, her wasted body within its loose grave clothes giving off an odour of wax and rosewood, her breath bent over him with mute secret words, a faint odour of wasted ashes. Her glazing eyes, starting out of death to shake and bend my soul. On me alone.....Her hoarse loud breath rattling in horror, while all prayed on their knees. Her eyes on me to strike me down.''[2] Such thought obsessions have received ample treatment at the hands of psycho-analysts but their appearance in literature long antedates the rise of the New Psychology,[3] which has only explained what forms the obsessions take when they appear as dreams, and the various ways in which they influence character and outlook.[4]

It has been a recognized practice to resort to comic interludes to relieve gloom and tension in a tragedy, but the importance of laughter as a sustaining influence to individual men and women in bearing shame and subordination had hardly ever been so clearly expressed until the science of psychology studied laughter, bringing out its full significance in relation to man. Wells speaks of the " consolations of derision." William Clissold tells us that servants and other employed people generally ridicule their masters and directors. " They find it necessary to divest these superiors of their superiority, give them undignified nicknames, detect their subtler frustrations, and then with a grasp of relief, ha, ha, life becomes tolerable again.''[5]

1 Aldous Huxley—Those Barren Leaves (Rotunda, p. 227) Chatto Windus, 1932.

2 James Joyce—Ulysses (Shakespeare and Co., Paris). Also " James Joyce's Ulysses : A Study, " by Stuart Gilbert (Faber and Faber, Ltd. , 1930), p. 101.

3 *Cf.* the sleep-walking scenes in " Macbeth."

4 Sigmund Freud—The Psycho-analysis of Dream.

5 H. G. Wells—The World of William Clissold, Vol. II, p. 414. The fact that subordinates delight in caricaturing and in making fun of their master is a matter of common observation. Jenkins, the junior shorthand typist (A Man from the North, by Arnold Bennett, Methuen, 1912), ridicules his boss as " Bertie dear." " Mrs. Smythe had once addressed her husband in the office as ' Bertie dear ' and thenceforth that has been his name among the staff." (p. 112.)

The psychology of association is not new in literature. Wordsworth proved his knowledge of it in "The Reverie of Poor Susan" where the poor village girl is led to see the common sights of her home in the heart of London in a momentary illusion produced by the song of a thrush. Colour, smell, and sound share in common this power of raising associations. Miss Mary Thriplow,[1] for instance, is carried back into the presence of a cousin Jim, seated at a barber's shop at Waltringham, by the fragrance of a leaf which she crushed between her fingers. Jim was dead and the incident thus remembered belonged to the past. This and the next example where the motive of revenge is studied in its conventional aspect of "an eye for an eye" are not specially related to the New Psychology except in so far they embody some experience which is true to nature, and is, therefore, to be treated as a part of psychological investigation.

Hugh takes Suzanne for a spin in his car. They are lovers. They travel far away through the darkness of night, and seeing that it is getting late, Hugh turns back and drives furiously. An accident overturns the car. Suzanne dies and Hugh is dangerously injured. But he recovers. The father, De Melincourt, does not forgive. The desire for vengeance burns in his soul. He takes Hugh to a castle in France, the property of his family, and there entraps him in the dungeon. Hugh pleads with him to let him out. But De Melincourt is inexorable: "Your hands are soiled with the blood of my only child. This is my revenge upon Suzanne's murderer; the key I have turned upon you is the key of death and hell."[2]

D. H. Lawrence has analysed the rise of parental affection in Will Brangwen in the following manner: "When he heard the child cry, a terror possessed him; because of the answering echo from the unfathomable distance in himself. Must he know in himself such distances, perilous and imminent?"[3] Lawrence thus seeks to define the tie which binds the parent to the child and which remains enshrouded in that obscure region where the deepest emotions lie hidden coeval with the origin of life itself and for ever defying any description beyond slight hints and suggestions. The appreciation of this fact is itself a great subtlety in analysis and marks the modern attitude intent on knowing the truth with absolute precision.

1 Rotunda, p. 49.
2 Winifred Graham—The Pit of Corruption (Hutchinson & Co. Ltd., London), p. 82.
3 The Rainbow, p. 198.

The following passage from Huxley's "Those Barren Leaves" could very well have been taken out of a work dealing with the psychology of fatigue: "There is the fact, for example, that slight fatigue increases our capacity for sentiment. Those compromising love letters are always written in the small hours; it is at night, not when we are fresh and reposed, that we talk about ideal love and indulge our griefs. Under the influence of slight fatigue we feel more ready than at other times to discuss the problems of the universe, to make confidences, to dogmatize about the nature of God and draw up plans for the future."[1] When fatigue reaches beyond a certain point, Huxley goes on to tell us, there is no other sensation except that of "the decrepitude of our being."

Walter De La Mare somewhat fantastically suggests a problem in his romance, "The Return," which may perhaps be brought within the scope of psychology, but its nature does not warrant a scientific discussion at this stage of our knowledge. The story may, however, be summarised in a few words to indicate what the problem is. One Lawford sits beside the crooked tombstone of Nicholas Sabathier, a Huguenot, who committed suicide on the eve of St. Michael and All Angels in the year 1749. On return home he is bewildered to see his face in the mirror. It is completely changed but in everything else he remains his old self. One of the characters in the story thus states the problem in the form of a question to his sister: "Supposing if by some impossible trick you had come in now, not the charming familiar sister you are, but shorter, fatter, fair and round-faced, quite different, physically, you know—what would you do?"[2] In Doctor Jekyll and Mr. Hyde,[3] which resembles this story, the problem is that of a fully developed and consciously controlled dual personality, each half of which is completely opposed to the other psychically as well as from the point of view of physiognomy. This control, however, tended to be weakened and was finally lost by indulgence in vice which accentuated the evil tendencies, replacing the virtuous ones along with the looks that went with the latter. Walter De La Mare suggests a different problem. The transformation is merely physical and not psychical and is caused by the influence of a departed spirit.

[1] Those Barren Leaves (Rotunda, p. 170).
[2] Herbert to his sister Grisel in "The Return," by Walter De La Mare (W. Collins & Co. Ltd., first published 1910), p. 144.
[3] By R. L. Stevenson, published in 1886.

Our question is whether such influence is possible. Psychology cannot perhaps deal with the problem which belongs rather to the field of psychical research.

Cardan in " Those Barren Leaves " says that he does not admit anything as immoral and that he can remain respectable in his own eyes and in those of others in spite of loading dice, drinking tubs of wine and "every weakness, every vice." They will not detract from his sense of honesty, sobriety, purity and highmindedness. La Rochefoucauld understood very well the need of a virtuous exterior in the absence of something more genuine when he observed: " Hypocrisy is the tribute paid by vice to virtue."[1] There is no justification for quarrelling with this view. Society has not changed in this respect since his days. The problem here is, if one can dissociate oneself from what one does. Most people, however, will deny having such a natural odour of sanctity that it will disinfect their septic actions and render them morally harmless. " When I do something stupid or dirty I can't help feeling that it is stupid or dirty. My soul lacks virtues to make it wise or clean."[2] The claim made by Cardan is excessive, even absurd, and unless it came in the midst of a serious conversation and was treated as serious by an important character (Calamy) in the story, one would be inclined to dispose of it as a joke. If Cardan means his claim to be serious, it will be necessary to examine into the meaning of the words whose service he desires to retain in his personal description or treat his condition as pathological.[3]

The use of strings of words by James Joyce in " Ulysses" had led to the question being asked if they really correspond to the stream of one's conscisusness, whether indeed thought expresses itself spontaneously in isolated words and phrases or in sentences. Opinion is far from being unanimous, and the problem cannot be settled until it can be definitely shown that the one or the other state of things represents the universal psychological experience. Richard Aldington, for instance, speaks of the reproduction of Leopald Bloom's thought by

1 Reflections and Moral Maxims

2 Those Barren Leaves (Rotunda, p. 278).

3 Ethel Cane's views (None of That, Tales of D. H. Lawrence, Martin Secker, 1934, p 907) closely resemble those of Cardan but the story shows that her own experience which turned out to be most unfortunate gave the lie to them. " If one lived the life of imagination, one could rise above any experience that ever happened to one. One could even commit murder, and rise above that. By using the imagination, and by using cunning, a woman can justify herself in anything, even the meanest and most bad things A woman uses her imagination on her own behalf, and she becomes more innocent to herself than an innocent child, no matter what bad things she has done."

James Joyce as "an astonishing psychological document," and observes: "The telegraphic method is there apt and justified."[1] Rebecca West criticises the practice, remarking that "there is nothing more certain than that sentences were used by man before words and still come with the readiness of instinct to his lips. They, and not words, are the foundations of all language. Your dog has no words but it barks and whines sentences at you."[2] Without speculating whether words or sentences were first used by man it may be observed that in the civilized state man has the option to do either. The objection of Rebecca West may be overruled on the ground that James Joyce does not accept the primitive psychology as his criterion and the persuasive fluency of the barking dog will, therefore, leave him unmoved. Joyce endeavours to register thoughts as they quickly chase each other in the mind of Leopold Bloom in the course of a single day. As a mirror of this fast-flowing stream of consciousness, the telegraphic method appears to be quite legitimate.

Thoughts which pass through the mind are like writing upon a half-faded palimpsest. They are arranged in layer upon layer, one layer brightening to conspicuousness for a moment and giving place to another in the next. Language, even the most telegraphic, has the defect of not being able to suggest this quality of simultaneity and multiplicity which belongs to the stream of consciousness. It represents thought as moving in a horizontal line, more or less as in continuous progress. Looked at from this point of view, Joyce does not fully succeed in his purpose on account of a defect inherent in language. This fact of human psychology which words and phrases cannot adequately express will lend itself to vivid representation by the symbolism of painting.[3]

Whatever may be said about the psychological soundness of language used by Joyce with its staccato breaks, fantastic inweaving

[1] Richard Aldington—Literary Studies and Reviews. (George Allen & Unwin Ltd., 1924), p. 202.

[2] Rebecca West—The Strange Necessity (Jonathan Cape), p. 32.

[3] Aldous Huxley appears to be fully aware of thought moving on many planes at the same time when he makes Miss Thriplow try to concentrate her mind on God. This is the picture he gives: "God is a spirit, she said aloud. But of all animals camels are really almost the queerest; when one thinks of the frightfully supercilious faces, with their protruding underlips, like the last Hapsburg kings of Spain.....No, no, God is a spirit all pervading, everywhere." "Those Barren Leaves" (Rotunda). But the difficulty of the medium leaves that fact unproved. Thoughts are here shown in a consecutive series and not simultaneously.

of sounds,[1] and the absence of punctuation, it is generally admitted that " Ulysses " is a masterly study in psychology. Arnold Bennett in an article in " The Outlook " speaks of the convincing realism of the unspoken monologue of Mrs. Bloom which covers the last forty pages of " Ulysses. " " Talk about understanding ' feminine psychology','' he writes, " I have never read anything to surpass it, and I doubt if I have ever read anything to equal it."[2]

Mrs. Bloom fully reveals her character in the silent monologue. We learn about her intrigue with Bolyan, her faith in God, delight in nature, and multitudes of other things concerning her attitude and experiences. There is absolutely no reserve in her. Here is a short passage in which she remembers a quarrel and details connected with it. She also makes mention of Pody's wooing of herself and the way it terminated: a " stand up row about politics he began it not me when he said about our Lord being a carpenter at least he made me cry a woman is so sensitive about everything I was fuming with myself after for giving in only for I knew he was gone on me and the first socialist he said He was he annoyed me so much I couldnt put him into a temper."

In the foregoing pages many instances of psycho-analysis in current English fiction have been noticed. Reference has been made to the influence of the scientific studies of Freud, Adler, and others. It is to be remembered, however, that a novelist of any individuality does not depend upon them for the portrayal of character. He trusts primarily to his own intuition and if he reads works on psycho-analysis it is to reinforce his impressions or to enlarge his notions which may suffer through a limited scope of observation. If he owes anything to professional psychologists, he also makes his own contribution to the development of the science of psycho-analysis and does not remain merely as a passive receptacle for ideas. It is only at the hands of inferior writers that psycho-analysis instead of becoming an aid in laying bare human motives acts as a hindrance and they never succeed in blowing the breath of life into dry bones, which, bending under the weight of scientific ideas, refuse to laugh and rejoice in life. The first impulse to explore the depth of the consciousness came

[1] The following is an example selected from the silent monologue of Mrs. Bloom in " Ulysses " : " Frseeeeeeeefronnnng train somewhere whistling."

[2] Also *vide* " Joyce's Ulysses : A Study," by Stuart Gilbert, p. 377.

rather from the Russian novelists like Tolstoy and Dostoievsky than from scientists who dealt with the subject technically and were not at all concerned with the extra-therapeutic application of their researches.[1] As we can sympathise with only what we understand, the increased understanding of human nature has led to the broadening of our sympathies.

[1] Thomas Mann—Past Masters and Other Papers, translated into English by H. T. Lowe-Porter (Martin Secker, 1933), p. 192

SPIRITUAL LIFE—ITS NATURE

CHUNILAL MITRA, M.A.

BEFORE we discuss any subject it is worth while to note that it is *we* who discuss—we, human beings, who are interested in the subject. Any discussion worth the name, to be of any importance and of any absorbing interest, must be of the type which is expected to satisfy some vital need of our life. And in the end if any discussion or conclusion fails to give any satisfactory answer to the query: 'is it consistent with life, does it bear fruit in practice, or is it consonant with the workaday world we live in, or does it offer any solution and consolation to the persistent problems of life and the living?' we may dispense with the conclusion at once. So also in discussing the nature of spiritual life we may at once dispense with any life that is not compatible with life itself. Thus whatever might be the nature of the spiritual life it is not at least an empty life of the spirit, *i.e.*, a life of ether—an ethereal life—invisible and intangible. It is not a life living on and in the air, *i.e.*, feeding on air and having its abode in the air, a life which is an object of investigation of the theosophists. And if this sort of life is what spiritual life stands for we are not concerned with it. A purely transcendent life beyond the mundane should be beyond the scope of our investigation.

We presume and take for granted that the spiritual life is the ideal life, and being ideal it is a life to be coveted and sought for. But what should be its nature? We do not think that a human life can work out his destiny when separated from the Universe. A 'life lived nowhere,' be it spiritual or not, is a false phraseology. All living life must be living here and now.

From the time of yore the East has a tradition of her spirituality and the West of materialism. But the spiritual life we have in view—and what the present world needs badly—is neither in the Indian spirituality nor in the Western materialism as it is found to-day. It is a synthesis and consummation of the two. It is not the life a detached sage lost in contemplation of the Absolute nor that of a materialistic philanthrophist whose sole aim is to increase the physical comforts and material well-being of his fellowmen. It is not in a

sannyāsin without a home or a hearth nor in a foppish landlord, of pomp and power but of base morality. We are for a sublime combination of both the physical and spiritual ends of life. But it is not an altogether novel life. It is a resurrection of the spiritual life of the sages and seers, the life that may give at least a plausible explanation of the worst and crudest riddles of life, where all the faculties of man have their rôle to play and no sense should be rooted out. It would not be a physical suicide to live in the spiritual. It is no sacrifice of the one at the altar of the other. But to speak of this spiritual life in this general way would be an unproductive labour for us For, in these days of scientific precision having for its watchwords the 'concrete' and the 'constructive' we may be required to give a concrete content to this spiritual life. In order to this I would say that it is an all-round life. For, the more comprehensive a life is, the more real it is.

I take a few cases as typically illustrative of the spiritual life, *e g.*, the life of Śrīkṛṣṇa, of Lord Buddha, of Christ and of Vivekānanda.

In characterising the life of Śrīkṛṣṇa as a life all-round Vedavyāsa says in the Bhāgavata that "it is the life of an ideal youth, an ideal king, and an ideal husband. He is the ideal friend of his kinsmen, and a loving child. He is death personified for the wicked and the vicious, and at the same time the highest intellectual. His is a life which does feel at home everywhere in nature. He is love and peace incarnate, and the Kaivalya of Patañjali. And if we call it a religious life we certainly mean more than a mere puritanism. It may be called a moral life, but it is anything but conventional; and it may be called a political life, but it is nothing of the kind of narrow patriotism. But I am loth to ascribe to it any such particular attribute. This is a sort of life we long for. It is the spiritual life and at the same time life real. The life we are living now and here is neither real nor spiritual. It is, as if, life is not really functioning in us. It is a compromise, a device, a makeshift and a mercantile technique.

The life of Jesus of Nazarath is another instance of spiritual life. In fact, 'Christ on the Cross' is the highest divinely human life we can possibly conceive of. Life of Jesus is a solace to the bereaved mother, the deserted wife, the forsaken brother and the poverty-stricken hundred. But himself was he crucified. The question was sometimes asked:—'Was Jesus married?' and the answer given is:—'Certainly

was he. He was married to the world at large.' Though metaphorical, the expression is not less significant. And the significance is nothing short of this, that Jesus was sorry for the sorrowful, depressed for the disheartened, mortified for the morose. And his crucifixion is a symbolic response to the accumulated woes and miseries of the millions. This is a life blissful but sorrowful because sympathetic to the sufferings of humanity.

In more recent times the life of Vivekānanda affords an illustration of spiritual life on earth. He was also wedded to the world, *i.e.*, lived a most universal life. He was above any sect, community or even nationality. His heart melted for the hungry, the unclad and the unfed. He healed those who were morally maimed and spiritually crippled. The souls of all these great men were concentrated on the task of the making of individuals, the training of manhood, the awakening of personality and individuality. But though these personalities were "hundred per cent. idealists and mystics, yet they were foremost realists and stern objectivists." Lives of this type we seek for realization. For, an Ideal Man is the ideal of man. More than Men we cannot be, and if we are less our own nature won't forgive us. We are endowed with the prerogative of being man in its highest sense, *i.e.*, attaining a spiritual life.

But questions of greater importance still remain. Is the spiritual life above woe and miseries ? Is it above any bondage ? Without the least hesitation I at once answer in the negative. Indeed, the spiritual life is blissful, it is pure and unalloyed. Nonetheless it is conscious of woe and misery. It is a life of freedom but never forgetful of slavery. We do not think that a Christ or a Vivekānanda, a Kṛṣṇa or a Buddha was ever deaf to the cry of the sick, the destitute, the helpless and the hopeless.

To take an instance: In the history of religion Lord Kṛṣṇa granted a charter of liberty to each and every individual in the prophetic utterance of the Bhagavad-Gītā. He granted the possibility of emancipation for all when he declared that the door of the spiritual life was open to all. You may get your passport and I mine. But himself was he born in a prison cell. Whence it was given to him to declare freedom for one and all. It is for him to preach the gospel of liberty who knows the pangs of slavery and bondage. So also the spiritual life is to ennoble the life physical, emotional, sensual and even vulgar. For in the descent and getting down of the spiritual the

vulgar no longer remains vulgar. It becomes sanctified with the holy water as it were. What I mean to say is that the sensuous, emotional, intellectual and the spiritual are complementary aspects of life as a whole. No doubt the spiritual life would be divine but it must not be unsympathetic to the human. It is the awakening of divineness in us—a divinity in humanity. To be cosmopolitan and international is not necessarily to contradict the national, provincial and even communal. So also if a spiritual life were scornful to the physical life, I would call it a life of a bondage of second type. To call such a life free, emancipated and real, is tantamount to saying that a nation is free, though under the domination of a foreign power, only because she has freed herself from another domination—only because she has shaken off another foreign yoke from her shoulder. It would be life in chains no doubt, only the chain is made not of iron but of gold. To be anxious to have such a life where other faculties find no place is as absurd as to strive to observe the race of the brain without legs and hands. We cannot conceive of a spiritual life *in vacuo*, and far from calling that life ideal I am loth to call it a life better. It is a diseased life. If my left hand happens to grow fat and not the whole body, I do not regard myself as possessed of sound health but as in a diseased state. And the sooner I get rid of it the better.

Such is my conception of spiritual life. And in complete consonance with this I believe also that it is the life eternal.

This conception of spiritual life is compatible with modern psychological tendencies and the present day scientific outlook. We do find nowhere in nature a spirit *per se* and a body *per se*. We do not find a pound of mind here and a pound of matter there. In the words of Einstein 'Matter is concentrated mind.' For modern psychology "what is vulgar in man has the highest metaphysical value." To quote the words of a great idealistic philosopher, Eucken, "Spiritual life is at the same time a self life and a cosmic life." If the spiritual life be of the psyche only, static and inert, the life of a stone or of a rock would have been more spiritual. On the other hand, if any spiritual life be the life of mere physique, the elephant or the stud bull would be enjoying a better spiritual life. But neither the one nor the other do we call spiritual. Our spiritual life must give sustenance and ample food to our body and mind, physique and phyche, emotion and intellect. Or, as the Upaniṣads put it: it must satisfy the annamaya, prāṇamaya, manomaya, vijñānamaya and

ānandamaya koṣas alike. Such a life we call the highest life, a life at once ideal and spiritual and a life eternal. It is not the life of mere jñāna nor of mere bhakti nor of mere karma. For, life is the pursuit of knowledge and knowledge alone would lose life itself and there would be left little or no residuum that can be made spiritual. A life of mere bhakti, of blind faith and of dogmatism would be a life of lethargy and inaction. And a life of mere karma completely divorced from the other two would be the life of greater mechanism. The spiritual life should be a synthesis and consummation of these three.

INTELLECTUAL STRUGGLES IN CHINA DURING THE SIXTEENTH CENTURY

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THE new form given to Confucianism by Chu Hsi and his school during the time of the Sung Dynasty in China in the twelfth century A. D. gradually assumed absolute and unrestricted domination over Chinese thought during the course of the following seven centuries. This success, however, was by no means due to any innate superiority in the intellectual content of this dogma over all other philosophical conceptions or to the persuasive force of its doctrines, although both factors may have attracted not a few adherents. Its position was rather far more a consequence of its protection by the power of the State, which finally identified itself with the system. Nor did the casting of thought into the uniform mould of Confucianism during the period in question proceed without contention and opposition. On the contrary, even the time of the Ming Dynasty (fourteenth to seventeenth century) was still filled with conflict over the interpretation of the canonical writings and therewith over the freedom of philosophical thought.

Chu Hsi's teaching consisted of a mechanical and materialistic cosmology which assumed the final origin of things to be the timeless interaction of the dualistic forces, Heaven and Earth, Force and Matter (*li* and *ch'i*), Darkness and Light (*yin* and *yang*). The canonical writings, however, he interpreted most arbitrarily so that they would afford support for his theories. He identified the "nature" or "disposition" (*hsing*) of man with *li* (cosmic energy), declaring it consequently to be "originally good," and viewing the body itself as the *ch'i*. The whole explanation found its roots in the *Ta hsuo* and the *Chung-yung*, that part of the canonical writing which is actually apocryphal in origin and contains much more of Taoist wisdom than of the teachings of Confucius. Opposition arose at an early date to this violation of tradition which pretended to be the final essence of truth and gradually led, under the ægis of the State, to the formation of an intolerant and overbearing orthodox class of *literati*. The roots of the groups and schools of thought that moulded

this opposition into contradictory doctrines extend as far back as the twelfth, perhaps even the eleventh century, and they found nourishment in the soil of Buddhist idealism and mysticism, to which may be added certain Taoist conceptions. Since the fifth and sixth centuries A.D. Indian wisdom had exerted a powerful influence upon Chinese intellectual life, which even Confucianism was not able to evade. Chu Hsi himself, if no Buddhist, had been at least in his youth an eager inquirer into Buddhist literature, and however much he expressed his dislike of Buddhism and Taoism in later years, his opponents often enough reproached him with having derived more from their tenets than he was willing to admit.

Chu Hsi's most influential antagonist was Wang Yang-ming (A.D. 1472 to 1528), perhaps the greatest thinker of his time in China. He also arrived at his cosmology by way of Taoist and Buddhist mysticism, and his philosophy cannot be termed other than purely idealistic. In his view, the sole possibility of recognizing all Being was intuition, the *instinctus naturalis*, the inner sense, which also played a part in European philosophy of the seventeenth century and which had already been spoken of by Meng tse in the fourth and third centuries B.C. Everything in the world, according to these teachings, depends upon the power of imagination of one's " own soul " (*pen hsin*), and " intuitive knowledge " (*liangchih*) alone solves all problems and embraces all things. For the " own soul " is but a single part, a single method of expression of the Almighty Being, that is, of Nature (*hsing*), with which it is thereby identified. This is an idea that closely approaches the Taoist conception of *tao*. This view and the diverging interpretation of the *Ta hsuo* and *Chung-yung* connected with it led to a charge of heresy being raised against Wang Yang-ming in 1522, but his fame as a scholar and his loyalty as a high official were more powerful than the opposition.

Wang Yang-ming left behind a large circle of disciples and admirers, and his teachings proved to be unusually stimulating and fruitful for Chinese thought, in so far as they were not fettered by State orthodoxy and finally paralyzed altogether. Not a few of his adherents, however, further developed his teaching in a direction towards which he would hardly have accompanied them and finally arrived at a radicalism that he would undoubtedly have rejected. For however much Wang Yang-ming may have combated Chu-Hsi, the commentator and announcer of Confucianism, he made not the

slightest attempt to undermine the authority of Confucious, the saint himself. His spiritual heirs, on the contrary, did not always pause even at that point, but criticized the " teacher of ten thousand generations " and contested his position, making thereby no attempt to conceal their leaning towards Buddhism. We do not know much about the doctrines of the numerous " heretics " who flourished during the century after Wang Yang-ming, since we possess few direct sources, by far the greater part of these having been destroyed by the State authorities. Their opponents themselves inform us, however, of the way in which the dogmatic structure erected by Chu Hsi was assaulted during the sixteenth and seventeenth centuries, how his antagonists finally ranged themselves with Buddhism that he had so strongly execrated, and how this movement cast ever widening circles and reached even into the ranks of highly placed officials.

Orthodoxy did not view the movement with indifference; numerous charges were brought against the " heretics " and justice vented its fury on the victims with very severe punishments. Most of the victims have disappeared into the obscurity of oblivion, but the fate of those of whom we have knowledge compels us to draw harrowing conclusions as to that of the others. Great courage and no little adroitness were required to voice one's thoughts against the phalanx of the supporters of orthodoxy, and still more to attempt to give effect to them. At all events, such an individual risked not only his office and his position in society, but also his life, and it is an astounding fact that so many fearless men were to be found who dared under such conditions to take up the unequal struggle for the freedom of thought and personality. One of these champions, one of those in fact who were most passionate in their rejection of the claims of orthodoxy and who consequently gave the most radical expression to their views, was Li Chih, born in Fu-kien in 1527. Owing to the expense involved, he was unable to pass the highest of the Government examinations in the Capital, and remained a provincial subaltern official, while devoting himself eagerly to philosophical and historical studies. These led him more and more to Buddhism and its doctrine of salvation, but simultaneously also to adopt an attitude of the keenest antagonism to Confucianism as represented by the *litarati* and the Government, a Confucianism which, in his opinion, did not conform with the real teachings of Confucius. Li Chih finally became a Buddhist, although only a lay brother and not a monk, because he

was always unwilling to tie himself to rigid forms of worship. He was naturally dismissed from Government service, and from that time on he led a restless wandering existence in the provinces of Hupei, Anhui, Honan, and Shansi, frequently lived in Buddhist monasteries, studied, wrote, and held meetings and philosophic discourses. Part of these writings, principally letters containing learned disputations, have been brought to light again by Chinese scholars after their suppression by the Manchu Emperors had been discontinued, and much may still be found, but a great deal has been irretrievably lost. For this reason, the very name of the self-willed thinker is almost unknown to the Western and even to the Chinese scientific world.

Li Chih combats the Confucian system with the assistance of Confucius himself. He proves with great acumen that many matters of fundamental importance as asserted by the dogma are actually not to be found in the teachings of Confucius, and that many others are in absolute contradiction to it. Thus, according to his view, the exaggerated cult of the family to be met with in later times is refuted by the behaviour of Confucius himself. The holy man did not even know where his father had been buried ; his family, after the death of his wife, consisted of a single son, but he did not consider a second marriage to be worth the trouble and in fact spent his whole life in wandering about without any idea of sitting at home. Li Chih further asserts that Confucius was never possessed of the idea of being considered the teacher of mankind for all time and that it was only the *literati* who proclaimed him as such. Nor did he ever aspire to be the guide of others or to teach others to be as he himself was. On the contrary, he taught that " what the superior man seeks is in himself." If good is to come out of ourselves, argued Li-Chih, there is no need to consult Confucius about it. Li Chih also uttered a warning against over-estimation of Confucius in other respects. Wise men had existed even before his time, and they could not wait with their development until Confucius had appeared. The claim of Confucianists to be the sole possessors of absolute truth was intolerable to this passionate champion who was tireless in explaining that Confucius never made any such claim ; it was only those who called themselves his disciples who had raised it and adhered to it. Everyone, he declared, is at liberty to search for truth in his own way and the endeavour should be recognized as long as it is honourable ; there is no doctrine that contains the whole truth and has been handed

down unchanged throughout the years. " If you firmly believe in the teaching of Confucius and act earnestly according to it," he wrote to a friend who later became an adversary, " I shall accord you my respect, but for that reason there is no need for your views being identical with mine," for " should anyone absolutely desire that all men be of the same way of thinking as himself, even the power of the universe cannot bring that about."

Contemporary reports, even from opponents of Li Chih agree in describing the powerful and lasting impression that he made on his hearers and readers, and emphasize that it was the keenness of his opposition to the Confucian dogma and its effects that brought him applause and admiration. He must have been a really popular figure and have had many open and secret friends even among the State officials. Even a work like the *Official Annals of the Ming Dynasty* writes of him in these terms : " Scholars and high officials who took pleasure in the (Buddhist) theory of meditation often came to Li Chih and sought connection with him. Day by day he called the scholars to exercises in interpretation (of the canonical writings), and women were also present at these meetings. He venerated Buddha in particular, and belittled and ridiculed Confucius and Meng Tse." From these words may be gauged the extent to which opposition to the new orthodoxy had evidently penetrated, when criticism of a nature that actually cast doubt upon the whole Confucian philosophy of life and touched the very foundations of the Confucian state found such an echo. The final aim of Li Chih and of very many others was to get aid of the Confucian system altogether and to effect a fusion of true Confucianism with the tenets of Buddha and old Taoism.

It is perfectly evident that orthodoxy could not passively view these developments unless it would abandon both itself and its State. In 1602, one of the censors of the Capital arraigned Li Chih on a charge of heresy and immoral behaviour (gossip had long since seized upon the fact that Li Chih's meetings were attended also by women). He was arrested in T'ung-chou near Peking, and his writings were proscribed and burnt. Depression or despair seems to have mastered him in prison, perhaps also fear of worse to come (for which there were precedents enough), and he committed suicide by cutting his throat with his razor.

Li Chih was only one of the many victims that orthodoxy demanded for its self-preservation. It is very doubtful, however, whether the

result of these intellectual struggles, which were gaining continually in violence, might not in spite of all have proved disastrous to the Confucian State had not the energetic rulers of the invading Manchus come to the aid of the harassed orthodoxy in the middle of the seventeenth century and shattered all opposition with the weight of State authority. From this time until well into the twentieth century Chu Hsi has dominated the intellectual world of China. At this point another thought intrudes. The Jesuit missionaries, Matteo Ricci, who had already been at work since 1583 in Shao-ch'ing, west of Canton as well as in Nan-ch'ang and Nanking, and Didace de Pantoja had arrived at the Capital the year before Li Chih brought his life to a close in prison. These men were at first clad as Buddhist monks and then as Confucian scholars, but proclaimed a completely new practical philosophy. Had they been able to divine the crisis that was at that time shaking the intellectual life of China, they would perhaps, by a suitable attitude, have attracted about them as large a circle of hearers as the other heterodox teachers, but that would assuredly not have been to the advantage of their mission. For the demand for something higher than that which Confucianism was able to offer must at that time have been very strong and widespread, because otherwise the passionate struggler of the sixteenth century would be inconceivable, and it is not to be wondered at that Ricci found hearers, friends and believers among the highest officials, in spite of the fact that his knowledge of internal conditions was probably barely sufficient to judge of the situation. He had also had a friendly meeting with Li Chih in Nanking in 1599 and had learnt of his fate in Peking. The Jesuit Mission survived the disturbances that followed the overthrow of the Ming dynasty, and the conditions that prevailed on the assumption of power by the Manchus left the Jesuits no option but to side with orthodoxy, the fame of which they blazoned so ardently in Europe. But when the Mission dared to promulgate its own "misleading" doctrines, it met in spite of that with the same fate as the heterodoxy of the sixteenth century, and the same orthodoxy put an end to its activities by a series of bloody acts of violence. It was reserved for more powerful forces to remove even orthodoxy from its throne one hundred and twenty years later and therewith to bring about the downfall of the Confucian State that it had supported, but which was now no longer capable of life (*Research and Progress*, Berlin).

VOCATIONAL EDUCATION IN BENGAL

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VOCATIONAL education! What a *wide-talked-of* subject to-day! It is on the lip of every mouth. In Bengal, nay in the whole of India, where idleness, inactivity and unemployment await the fate of our educated youth it is the crying need of the hour. The introduction of vocational education has become a serious problem, but no solution is yet forthcoming. This subject, therefore, demands our special attention.

We stand to-day in a newer and more rapidly changing world. Great social upheavals are on all sides and human activities are seeking a variety of new channels and directions. Bengal has to face new phases of economic life.

There was a time when an ample demand from offices and professions justified the products that were being turned out by our schools and colleges every year. Now there is no need for them. As a result of that, our educated youths soon after finishing their studies find themselves in a morass of disappointment, unable to discover suitable outlets for the utilisation of their knowledge and proficiency. They find that the warm welcome that greeted their predecessors a quarter of a century ago is now chilled into a contemptuous silence. As they roam about with a tired mind and a starved body looking for a humble berth in life, advice *gratis* is impertinently hurled at them. The practical men of the world find a sadistic pleasure in humiliating these helpless creatures. They realise the bitter truth that the golden days of their life have been spent in chasing empty abstractions. They now learn to think that they are so many shadowy beings but not the creatures of the world they live in. Disaster is bound to overtake a nation when its educated youths after spending years in equipping themselves for the struggle of life find themselves ultimately cast adrift upon a wide and not always a merciful world.

The task before the nation is, therefore, of vital importance and full of responsibilities. A newer awakening to the cause of education

is the need of the day. We are to seek out newer ideals of education that may be followed in our schools to the best advantage of our children, and pursuing which they may become the good members of the present society and the fountain sources of inspiration for the future generations of the province.

All over the country there is to be noticed a vague feeling of growing discontent about the system of education prevalent in our country. The cause of this is not far to seek. The present system of education does not cover the needs of the day. The stress of the current system is on the intellectual phase of our mind. We have separated the intellect from the rest of our nature. Our sole attention is devoted to giving children information, without having any regard to the fact that by this emphasis we are creating a conflict in their physical, intellectual and spiritual life. Knowledge with us is synonymous with a mass of information. So there stands a criticism that our educated youth is an economic misfit. It is also told that the youths of our country are so many physical weaklings having no aptitude for business or other specialised work. Neither they know their possibilities nor they have the gift to utilize their knowledge and training. But the defect lies not in the youths but in the education they receive. They want food to satisfy their extreme hunger but it preaches sermon before them which is practically useless at this critical moment. What they want is vocational education to qualify themselves for the profession or calling in life but the present system of education provides them with that stereotyped education which has its cultural value only and hence fails to meet their demands.

Now we arrive at this conclusion that our educational system should be carefully planned and co-ordinated with the economic life of our children. To say more clearly, training in the manual arts and trades should form a part of the regular programme of studies of our children.

Before we venture to submit any scheme, it is deemed proper to study the past. Vocational education was not at first very popular in Bengal ; such of it as existed consisted in instruction given to their own children by crafts-men belonging to the artisan classes. A carpenter brought up his son as a carpenter, a weaver brought up his son as a weaver, and so on. Industrial education of a systematic and academic kind was not appreciated. Of late, however, it has grown in popularity, and some institutions for imparting it have been founded. Some of

these institutions are managed by Government, some by Municipalities and Local Boards, and others are maintained by missionary societies or private benefactors. The question of improving the system of industrial education has lately been under the consideration of the Government, and provision has been made for sending certain number of advanced students to obtain technical training in foreign countries. Vocational Education of a higher and scientific kind, such as Law, Medicine, Engineering, etc., is given in our colleges. Only those who have had higher education of a general character can go in for these learned professions. Unfortunately, no active step has practically been taken as yet to introduce vocational training in schools for those who have not received much of general education. The Industrial Commission and the Senate of the Calcutta University have made recommendations for much larger expansion in this direction but no solid work has yet begun.

What then, therefore, shall be done to raise Vocational education to a point where it will be much more appreciated by our countrymen ? The answer may best be found, I believe, in turning our eyes to the other flourishing countries of the world. In Europe and America, education is carefully planned and co-ordinated with the economic life of the nations. Training in the skilful use of the hands had justly claimed a place alongside of purely language training in educational scheme.

In the field of educational handwork Sweden may be said to have been the pioneer. The educational development in Europe and America is to a great extent the result of the work of J. F. Herbart, the great German philosopher and educational reformer. According to Herbart's theory, training in the skilful use of the hands might justly claim a place alongside of purely language training in the educational scheme of raising man above the brute creation. " The hand has a place of honour besides language in elevating mankind above the brute." So every human being ought to learn how to use his hands. Herbart holds that such educational scheme serves three-fold purpose: (*i*) it equips the individual with a training to be engaged in gainful occupation, (*ii*) that trade and technical knowledge afford a clearer understading of the fact of nature and of human civilisation and (*iii*) that it widens the mental horizon which is valuable as a means of general culture. He further says that vocational training is a valuable aid to the reformation of the incorrigible.

Thus we see that the utility of vocational education is manifold, and Bengal is in urgent need of it. Now the question is how to bring it within the four walls of our schools which are purely academic in character. Regarding this, my humble suggestion is that two measures can be adopted: (1) establishment of manual training classes in schools and (2) apprenticing the youth to competent masters. Let me add, in this connection, that the manual training classes should not be trade classes in the narrow sense of the term. They must have disciplinary value.

In order to give them vocational training segregation of the pupils from regular class room is needed. Vocational guidance and selection of one's life-work are the two important features of vocational education. As soon as the boy comes to Class VII, a period extending not more than three months should be kept reserved to study him and to ascertain the course of his future training. This may be called observatory period.

At this stage his I. Q. should be measured and a good scope should be given to him for the full display of his motor activities and spontaneous interest and efforts so that he might be led to select a life's occupation for which he possesses special tastes and abilities. Moreover, his spontaneous response to the surrounding objects should be carefully guided, encouraged and watched. At this stage boys are very imaginative. They must be kept employed at all events, because idleness leads to misbehaviour and lawlessness. So, I think, this is the best and most suitable period in a boy's life when vocational training can be imparted to him for the first time. Thus, furnished with the necessary information regarding the boy, the teacher may proceed well with his work.

It is better to observe, in this connection, that we need more of the spirit of adventure in relation to our work as teachers. To me the work of a teacher, my own work, is an adventure. It is one long thrilling phase of *discovery*—discovery of the child, and discovery of the means to stimulate the child to make discoveries of his own. There may, of course, be disappointment. But this is the frequent lot of the laboratory-worker, every explorer of the unknown. "Failures are the pillars of success," goes the proverb. Many of us, specially, the old and the weary, and the young and the vain, are apt to regard the principles of our profession as being cut and dried, fixed for ever. Those who have foamed in the field of psychological study will bear

me out when I say that no subject presents a greater difficulty than the study of human mind, how it works, acts on, and is reacted upon by the body, and by other outside forces. In reading and thinking about the work of our children, in making observations of our own, and in keeping a record of them, however humble, there is a tremendous field of interest for the adventurous teachers.

Let us now discuss what are the vocational subjects that should be included in the curriculum.

To this my first answer is that there are various kinds of vocations and therefore various kinds of vocational subjects. It is very difficult to say what subjects should be taught and what not.

One may say that since more than 95% of our children make a living out of agriculture, allied pursuits and rural industries, we should provide for a training in those subjects to enable them to become better farmers and better craftsmen. Of course, there is some argument in it. But it should be noted that effective arrangement for training only in some selected vocational subjects cannot be made always and everywhere in Bengal. So, I think, it is better to leave the matter of selection to the local bodies consisting of the teachers and some of the interested public. Each of such committees may be termed "Vocational Guidance Council."

In the affair of selecting subjects for vocational training the council is expected to count much on the following important factors:—

(1) Job Analysis—demands of the job,
—demands and supply of workers,
—working condition,
—wages,
—future prospects, etc.

(2) Character Analysis—intelligence of the boy,
—his specific abilities, etc.

It should also consider how far the practical side of the course can be given effect to, because this side is more important than the theoretical one.

Some of the following subjects may be selected according to the need and suitability of the situation:—

(1) Agriculture and gardening, (2) Manufacture of toilet requisites, umbrellas, etc., (3) Carpentry, (4) Smithy, (5) Watch-making,

(6) Tailoring and Sewing, (7) Soap-making, (8) Weaving, (9) Dyeing and Calico-Printing, (10) Commerce, (11) Electroplating, (12) Music, (13) Drawing and Painting, (14) Book-keeping, (15) Photography, (16) Clay-modelling, (17) Cane and Bamboo work, (18) Telegraphy, (19) Wireless, (20) Pottery, etc., etc.

More can be added to the above list if opportunities for teaching vocational subjects also favourably increase. The subjects should be taught almost exclusively in a practical fashion, the theoretical portion being taught in a most elementary manner. The theoretical side of the course should be taught inside the school and the practical one outside. For each of the subjects a regular course of training is necessary.

In my opinion the ends of Vocational education can be far better met by boarding-schools than by day-schools. Boarding-schools can teach co-operation, and that is one of the most valuable lessons that can be imparted to our boys and youngmen for meeting the realities of life. The vocational school should be the centre of the life of the society, and if it is, we may be sure of its success.

Our discussion may be concluded with the following observations: The school to-day should exist not merely for fostering a purely academic life, the measures of which are only examinations, but it should be for shaping the future life of its pupils. We need to-day a revolution in our outlook—the centre of gravity of the entire system of education needs to be shifted. The *whole man* is to be re-instated in his proper place. The function of our New Education should be the *growth* of the *man*—man whose work is useful in life and whose leisure is fruitful in creative joy. In a word, it must have a double task—the task of providing for livelihood and for leisure.

It can be hoped that the problem will be taken up in right earnest by all our countrymen, seriously interested in Education and in the welfare of the nation.

THE QUESTIONNAIRE METHOD IN VOCATIONAL PSYCHOLOGY

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THE play of examiners' and employers' idiosyncrasies in the examination and selection of candidates with the consequent unwholesome and unsatisfactory results, has led psychologists to adopt measurements in which personal factors have no place. Objective methods have been devised by which a person's abilities, temperament and other information regarding his attitudes and habits can be elicited or traced. One of the objective methods which is most commonly followed in vocational psychology is the questionnaire method. There are other tests in actual practice which to a certain extent serve the same purpose as the former, but these tests, to quote Symmonds, " are designed to find out what a person can do, while questionnaires are designed to find out what a person has done or will do or how he thinks or feels or believes. "

The use of questionnaires as a method of objective measurement can be traced to Francis Galton who very early laid down certain cautions. According to Galton,

(1) The questions must be such as can be quickly and clearly understood.

(2) They must admit of easy reply.

(3) They must cover the ground of inquiry.

(4) And lastly, they must "...tempt the co-respondents to write freely in fuller explanation of their replies and on cognate topics as well ...These separate letters have proved more instructing and interesting by far than the replies to set questions. "

The chief advantages of this method are the following. First of all, a very large sphere may be covered by this method of inquiry. With little effort, time and financial outlay a questionnaire can be framed and distributed widely over a large area. Within short time thousands of data can be collected. In these respects no other procedure can stand near it. Secondly, a problem may be scrutinized from various angles by framing suitable questions covering all possible

aspects. And lastly it furnishes clues for further investigation. From the scientific point of view the last mentioned advantage is of utmost value.

Though there are these advantages some drawbacks of the procedure are noticeable sometimes and care should be taken as far as possible to avoid them. Firstly, the questions are often framed in such a way that they demand specific answers such as, yes or no, true or false and the like. There are many persons who refuse to be categorical in their replies and so if they answer at all the information they give will obviously not be a correct one. A wide latitude as far as possible should be given in answering the questions. It is desirable to bear this point in mind and to put questions in such a way that persons do not need to be categorical but get ample latitude in answering them.

Secondly it should be noted that there is a close correspondence between nature of instruction and response. In the case of children it has been definitely found that when a question put to him has a negative form, he invariably answers negatively and a positive form of the question elicits a positive answer. How far this principle works in the case of adults too, is not certain. Questions, therefore, should be of such a nature as to avoid as far as possible, either a positive or negative suggestion.

Thirdly the questions sometimes appear to some persons to be too much encroaching on their private life, and so they are left unanswered. Whether these omitted responses are to be dropped from the count or to be dealt with as one-half positive and one-half negative are matters of consideration. In absence of any other suitable way of meeting this situation, the latter procedure, that is counting one-half positive and one-half negative is often adopted. On the one hand runs the maxim, "Silence gives consent," and on the other hand it has been found that failure to reply often means a negative reply. It is rather difficult to find a really satisfactory solution to this problem. Assurances like 'Answers to be kept strictly confidential' may sometimes be helpful, but nothing can be definitely said about the degree of influence of such assurances on the nature of the replies. The difficulty may to a large extent be overcome if some checks are introduced in the questionnaires. For example, in order to determine whether a person is social or not, several questions, the aim of all of which is to detect the social nature of him, are set in different form

and language at different places. If one of these questions is left blank by the subject, inference on the point can be drawn from the other allied questions. When there is only a single question on a particular aspect and it is left unanswered by the subject, we may try to form an indirect inference about the nature of his probable answer on the basis of the informations that are supplied to us by his answers to other questions. This method of interpretation, however, is a risky procedure, inasmuch as there is every chance of personal factors, operating and distorting the interpretations. Consistency and unbiassed attitude on the part of the experimenter should, therefore, be maintained. Efforts should be directed towards standardisation of such a method of interpretation, so that subjective factors may be eliminated as far as possible. I think, this is the best procedure to adopt in dealing with cases of omitted responses.

Fourthly it has been found that one is inclined to give the answer that he thinks is expected of him, instead of the true answer. Recently in the United States, this has led to the use of disguised questionnaires. The disguised questions are scattered among other questions and are set in such indirect form and language that the subject does not get any idea as to the real purpose of the questions.

Fifthly it has been found that being asked to assess one's personal qualities there is a general tendency to underestimate oneself. On the other hand when opinions are sought, about the degree in which a particular quality or trait should be present in order to achieve success in a vocation, there is generally an overestimation. These factors complicate the statistical treatment of results.

Sixthly one of the most important points to be always remembered, refers to the form and language in which a question is put. Questions must always be simple, easily intelligible and free from all possible sources of ambiguity and misinterpretation.

Lastly there is the difficult question of interpretation of the results. Not only in the questionnaire procedure but also in other scientific procedures interpretations are required. But on account of the answers received by this procedure there is a greater possibility of errors creeping in here. In psychological experiments minor inconsistencies which in other scientific departments might have been easily overlooked, sometimes reveal startling facts. So a proper caution should be taken during interpretation of results, and uniform method should be devised and adhered to as far as practicable.

There arose sometimes back a controversy regarding the use of questionnaire as one of the methods of objective measurements. It was further said that psychology was the only science that resort frequently to this sort of procedure. A little reflection show that both these criticisms are unjustified. Not only in psychology but in other scientific investigations, the use of this procedure can be found. Some assert that the procedure is pre-scientific and not an experimental one. This assertion has some truth in it, but if sufficient attention be given to the cautions mentioned previously, during framing of the questions, tabulation and interpretation of the answers, the defects of the method can certainly be overcome to a large extent.

A method which has so many advantages and opens up so many avenues of investigation should not be lightly given up, on account of some technical difficulties of its application. On the contrary it should be the endeavour of all scientists to devise ways and means by which it can be perfected, and made serviceable and fruitful. Fortunately, such efforts are being made by psychologists in America and other countries.

Before concluding I may refer to a large-scale investigation that is just at present being conducted in India. The All-India National Planning Committee at Bombay very recently has made an attempt for having informations on every aspect of industrial development of the country. For this, they have adopted the questionnaire procedure. The committee expects to gather thereby useful data to formulate a comprehensive plan for the economic development of India, with due regard to social reactions. The result of this investigation will be awaited with interest. We also expect to hear about the difficulties that are likely to be experienced by the committee in following this method. It should be noted, however, that special complications which necessarily arise in cases of psychological experiments are not likely to occur in this particular investigation.

THE BEGINNINGS OF BRITISH ADMINISTRATION IN BENGAL

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I thank the Secretary of the Rotary Club [1] for the honour he has done me in asking me to speak to you on a subject of my choice. You will pardon me for choosing what may be considered to be a subject of purely academic interest. I hold, however, that the beginnings and development of British administration in India have a living interest for all times, and are not merely subjects to be discussed by advanced students of history alone in academic conclaves. In saying so I do not hold that a study of early British administration directly helps us to clarify modern political problems. Circumstances have changed radically, and with them the political problems to be faced. There is a wide gulf between pre-mutiny and post-mutiny administrative and political problems. Yet the beginnings of British administration in India remains a subject of perennial interest because of the very peculiar circumstances in which it started and grew, the problems with which the first administrators were faced and the spirit in which they tackled them. Indeed the circumstances under which the seeds of an administrative machinery were laid have no parallel in modern history. It was not the case of a military conquest by an advanced state of a backward people, where the people had no culture and no tradition, nor the rudiment of an administrative system, and could be very well ignored or exterminated. First, so far as Bengal was concerned there was practically no military conquest. The battle of Plassey was not a great military achievement ; neither was Bengal conquered at Plassey. Secondly, the organised forces of an advanced state were not employed in systematically conquering Bengal. A mercantile company had been forced in self-defence to fortify their factories, equip armies and fight the Indian powers. There was at the early stage no considered plan to establish an empire and take up political responsibilities. The breakdown of the Mughal Empire and the anarchy that followed the consequent disintegration found the company embroiled in Indian politics and gradually political responsibilities fell

[1] Delivered at the Rotary Club, Calcutta.

on them. They were at first averse to such responsibilities. Being strangers to the administrative problems of an alien people with completely different culture and traditions, they very wisely refrained from imposing at once an alien system of government and preferred to use the remnants of an already decrepit administration. Gradually as their knowledge of local conditions increased, they began to superimpose experimental structures on the basis of the old. This is best illustrated from the history of Bengal between 1757 and 1793 because the conquest of Bengal was not a military conquest but a process by which gradually the English extended their powers until the vitality of the nawab's government was sapped.

Before Plassey the English in Bengal were no more than zemindars of the three villages of Kalikata, Sutanuti and Govindapur paying an annual rent of Rs. 1,200 a year. As such they exercised the same jurisdiction which Zemindars were entitled to do over Indian residents. After Plassey their territorial acquisitions were only the Zemindari of the 24 Parganas which they obtained by sanad from Mir Jafar. Their position, however, was fundamentally changed. In theory they were petty Zemindars. Yet in fact they had become masters of Bengal. They had become king-makers and to them belonged the most effective military force in the province. For the next four years the English enjoyed power, but without responsibilities. The result was the abuse of trade privileges, the ruin of Bengal merchants and manufacturers and the anarchy following from a complete want of government which made the famine of 1770 possible. The relieving event of this period was the cession by Mir Kasim of Burdwan, Midnapur and Chittagong to the English. In these ceded districts the English started a direct administration, so that at least a part of Bengal was saved from anarchy. Burdwan, Midnapur and Chittagong were the first nurseries of British administrators in Bengal.

On the death of Mir Jafar in January, 1765, the English decided to have a definite hand in the internal administration of Bengal. They started to nominate the nawab's revenue officers and to exercise a control at the capital over the revenue collection. The new nawab was not allowed to maintain any troops except what was necessary for the dignity of his person or for the task of revenue collection. This arrangement which was thrust upon an unwilling nawab and resisted tooth and nail by Nanda Kumar was regularised by Clive on his arrival when he obtained from Shah Alam the diwani of Bengal, Behar and

Orissa. The English thus became servants in the Mughal imperial system.

A very large part of the government of Bengal fell into the hands of the English. They now became responsible for the collection of the revenues and the administration of civil justice. The administration of criminal justice and the preservation of law and order indeed remained in the hands of the nawab, but the Company's late transactions with him had destroyed the sanction behind the native executive and undermined the very basis of the nawab's government. Clive fully realised that nothing remained to the nawab but the name and shadow of authority. In order to guard against the jealousy of foreign powers, however, he insisted that it would not be wise to throw off the mask and declare the Company to be the real ruler of Bengal. Bengal, therefore, fell on evil days. The nawab was unable to discharge effectively the functions that remained to him, nor would the Company step in to provide for criminal justice and preservation of law and order. More unfortunately the Directors formed a very limited idea of the functions of the dewan, restricted the activities of their servants to the supervision of revenue collection, leaving the actual task to the existing agency, and ordered that civil justice and whatever came under civil administration was to remain in the hands of the impotent nawab. The shyness of the English was but natural, for they were as yet ignorant of the complicated system of land tenure and the problems connected with it. In the face of facts, however, they were forced to abandon their reluctance and gradually assume responsibilities. The sad state to which the diwani provinces had been reduced as compared to the districts under direct administration led them to appoint supervisors in 1769. These were the first English executive in the districts. The revenue collections were to continue in the hands of the existing agency, but they were to report all transaction to the Supervisor who could veto their acts and report to the Resident at the Durbar. The supervisors were to have the same negative voice in all judicial proceedings. The most important part of their work was to be to gather information. They were to report on the history of the province, the state of the revenue, the produce and capacity of the lands and the state of manufactures. Without such preliminary information no administrative machinery can be built up. The supervisors were many of them young and inexperienced men, and had been given great powers. They became lords in their districts and

defied the Calcutta board. On the other hand the Indian agency resented the new control established over them, and refused to part with the information relating to the lands which they alone possessed. This state of affairs led to a deadlock which impeded the work of revenue collection. The council was, therefore, forced to withdraw the obstructive powers of most of the supervisors.

The experiment was not, however, a total failure. Some information was collected and some of these men aquired invaluable experience.

It was at this stage that the Directors decided to abolish the dual system and to "stand forth as Dewan and by the agency of the Company's servants to take upon themselves the entire care and management of the revenues." This change of policy has been described by Mill as a revolution much greater probably than any previous conjuncture—than even the change from Hindu to Mahomedan masters had been able to create." Warren Hastings was appointed governor of Bengal to give effect to this new policy. He was practically given a *carte blanche*, because the Directors not only did not formally repeal the existing regulations but left the execution of their orders and the planning of the new system to the governor and his council. Hastings immediately proceeded to act with decision. With the instincts of a true statesman Hastings clearly saw that there should not be a complete breach with the past. The Company's authority must be enforced, otherwise there could not be any real Government; the administration must be purged of its evils. But the vital powers latent in the Indian fabric must be given free play. In a letter to Colebrooke in March, 1772, Hastings wrote that the remedy was not to "introduce fresh innovation but to restore the government to its first principles." Many regulations were needed "but not one perhaps which the original constitution of the Mughal Empire hath not before established and adopted and thereby rendered familiar to the people." Hastings had a high idea of the native agency and he aimed at establishing a strong power at the centre with Indians conversant with local needs and customs at the extremities. In order to strengthen the Company's authority he transferred the courts of appeal and the treasury from Murshidabad the seat of the nawab to Fort William, the Company's head-quarters in Bengal. After some experiments the revenue administration was also centralised at Calcutta and placed

in the hands of a Committee of Revenue. Hastings assumed that under the new regime the functions of the diwan and nazim no longer remained separate. He, therefore, not only reorganised the local civil courts but sought to prevent miscarriage of justice in the criminal courts. He thus took the initial steps towards the control of the Company over the Nizamat completed later by Cornwallis.

The thorniest questions for the English until they were shelved in 1793 were those that related to the land revenue. Apart from the machinery of collection there were three points over which difficulty arose. First, with whom was the settlement to be made? Secondly, for what period? Thirdly, what was to be the rate of assessment? Much depended on an actual knowledge of the history and value of the lands. This could, however, only be obtained by the tedious and expensive process of a detailed survey. Yet such a survey was never made—not even when the lands were settled in perpetuity. Hastings, when he was confronted by the question of the best method of land revenue collection found no other alternative than to farm out the lands for a period of five years. The farming system, however, soon proved a failure. The council then entered into a long but futile debate on the best method of settling and collecting the land revenue. Hastings on his part was determined to avoid the evil effects of an assessment based on faulty information and accordingly appointed the Amini Commission to tour the districts and collect accounts and papers relating to the land. The Directors, however, did not fully appreciate the value of gaining more knowledge of the lands, expressed disapproval of Hastings's efforts in that direction; yet, unable to make up their minds, ordered annual settlements.

The English had progressed so far in establishing their administration in Bengal when Cornwallis appeared on the Indian scene. Cornwallis completed much of the work which Hastings had begun. Hastings had abolished the dual government and had established the Company's authority over Bengal. He had even crossed the legitimate boundaries of the functions entrusted to the Company as diwan and interfered in the jurisdiction of the nazim by exercising control over the administration of criminal justice and the police of the districts. Under Cornwallis the remnants of the power vested in the nawab as nazim finally disappeared. He not only brought the administration of criminal justice and the preservation of law and order in English hands, but even went so far as to modify the Muhammadan law that was

administered in the criminal courts with a view ultimately to substituting English criminal law for Muhammadan law. The traditional division between the diwani and the nizamat functions disappeared when in 1793 civil justice including revenue cases and criminal justice came under one judge and the collector was deprived of his judicial duties and confined to revenue administration only.

From many points of view Cornwallis's period of administration marked a new change in Indian affairs. He had not risen to the highest post from the covenanted ranks of the Company's service; and though appointed by the Company he owed his nomination to the ministry. His loyalty, therefore, would be to the English nation and not to the limited interests of a commercial corporation. This was, therefore, one more stage in the increasing control of the English Parliament over Indian affairs, and India advanced a step nearer to her incorporation in the British Empire. New principles of government were brought into application. "The happiness of native inhabitants" became one of the chief concerns of the government. With this object the Company's services were purged of abuses, and trading activities and monopolies by the Company's servants restricted. All that the Directors wanted as land revenue was a "moderate jama regularly and punctually collected." There was, therefore, no further experiment with theories and schemes and a settlement in perpetuity with the Zamindars was entered into. Further Cornwallis was asked to organise the administration upon a simple basis and "steady adherence to almost any one system" was considered to be a preferable policy. The Cornwallis system of administration was, therefore, inspite of its many imperfections continued with occasional minor changes for quite two decades.

Though actuated by the best of intentions, Cornwallis, upright, just and honest, lacked the genius and statesmanship of Hastings. Hastings considered that the people should be governed by their own laws and usages, and that Indians conversant with local conditions and local needs were best suited to carry on the work of administration in the districts. Cornwallis on the other hand contemplated the wholesale introduction of English law and would not allow Indians to hold the higher administrative and judicial posts in the province. It was fortunate for India that the English criminal law in the condition that it was before Mackintosh purged it of its absurdities and severities was not actually introduced.

We can excuse Cornwallis for his contempt of Indian laws and usages and his distrust of Indian agency. He had no knowledge of the province. He had not lived and worked with Indians as the Company's servants had done. He could not, therefore, be expected to have the same attitude towards them as Hastings. Besides Cornwallis looked at India from a different angle than a Company's servant would. To the Company's servants the territorial possessions were a business concern. To Cornwallis Bengal and India was an imperial dependency, and in Cornwallis's days no statesmanlike view had been formulated with reference to the remainder of the overseas empire of Britain. In 1793 Cornwallis wrote, "Although we hope to render our subjects the happiest people in India, I should by no means propose to admit the natives to any participation in framing Regulations." The people were to have peace and prosperity. But they were to have no share in making laws and only an insignificant share in administering them.

The Company's administrative structure was now complete. Slowly it had extended its control over every branch of administration. The direct method of expelling the existing rulers and setting up a new government was not resorted to. Gradually they ate into the vitals until nothing was left but the outer crust. When the time came this outer crust was thrown away and the English revealed themselves as the real rulers of Bengal.

AN EARLY HINDI PRIMER

KALIDAS MOOKERJEE

At the beginning of the 19th century education of the Indians was a pressing problem before the English literate. Hence various methods were adopted by them, most important of which was the foundation of the Calcutta School Book Society. The following two Rules of the above Society give out its aims: —

"2. That the objects of this Society be the preparation, publication and cheap or gratuitous supply of works useful in schools and seminaries of learning."

"4. That the intention of the Society be directed, in the first instance, to the providing of suitable books of instruction for the use of native schools, in the several languages (English as well as Asiatic,) which are or may be taught in the provinces subject to the presidency of Fort William."

A similar society, of course at a later period, was established in Agra in 1833. These societies published various books, in Hindi, Persian, Bengali and many other languages. Out of the books published in Hindi by the Calcutta School Book Society, the following are worthy of note: —

(*a*) Neeti Cotha (in 1822),
(*b*) Upadesha Kathā by Mr. Stuart,
(*c*) A Dictionary of the Hindi language complied by Rev. M. T. Adam,
(*d*) Hindui Reader (in 1837).

The Agra School Book Society published the History of England in 1837 and Kathāsāra in 1839.

If we were supplied with all the books published by the above Societies, an important factor in the history of Hindi literature would have been marked. But more than a century has passed by and various occurrences have prevented us from getting all the Hindi books. Whatever we get are in a rotten state, being wholly or partially destroyed by the insects, rain and fire. One of these books is the first "Hindooee-Primer."

This "Hindooee-Primer" is a small booklet containing only 16 pages. Its length is 6″ and breadth 4″. It was published for the Hindi beginners. The title page of the book runs as follows: —

"HINDOOEE-PRIMER बालकों के लिये प्रथम शिक्षा पुस्तक। कलकत्ता स्कुल बुक सोसाइटि के लिये छापा गया। C.S.B.S. Calcutta: Printed at the School-Book Society's Press, Circular Road; and Sold at the depository. 1829."

The first page contains the Devanāgarī alphabets—Vowels and Consonants. It begins with वर्णारम्भ वर्णमाला देवनागरी की. The second, third and fourth pages contain the various consonants with their usual modifications when combined with vowel, *e.g.*, क, का, कि, की, कु, कू, के, कै, को, कौ, कं, कः।

From the bottom of the fourth page up to the seventh page are the various conjuncts like क्य, भ्य, ज्य, ल्म, ध्र, etc. Half of the eighth page contains "साङ्केतिक द्व्यक्षर संयुक्त सङ्केत से दो अक्षरों का योग"। These are ल्क, न्फ, ह्न, etc. The rest of the eighth page and partially the ninth page contain "तीन अक्षरोंका योग," *e.g.* स्थ्य, ङ्ख्य, etc.

In the ninth page in one line are given "चार अक्षरोंका योग", *e.g.*, न्स्थ्य, ल्प्य्य, etc.

Then from the middle of the ninth page begins the first lesson (१ पाठ) which contains "दो स्वरों के शब्द" and these words cover the tenth page to some extent, some of these words are सब, काम, हर, चाळ, लोग, और, भोर, चोर, पुल, ज्ञान, गोल, दिन, मन, शील, धीर, सुख, etc.

From the bottom of the tenth page begins the second lesson containing the same "दो स्वरों का शब्द", some of these are काया, पाल, पानी, बेला, भोला, धोबी, आंधी, दस्यु, कांटा, गर्व, माला, मौली, मूर्ख, etc., and this system covers the whole of the eleventh page too.

From the 12th up to the 15th page there are four lessons in prose. The first lesson runs as follows:

पहिला पाठ

बालकन् के शीखने का।

भले हैं वे बालक जो अपने पाठ को कण्ट कर्के गुरु को सुनाय देते हैं। और धन्य हैं वे जो माता-पिता की आज्ञा को मानते हैं। सत्य बोलना बड़ा पूण्य है, मिथ्या कहने से पाप होता है। बालकपने में विद्या शीखने से युवा अवस्था में सुख होता है। सब के साथ प्रेम कर्ना अच्छा है।

The fourth lesson is like this :—

मत् कहो कभी बुरी बातैं, वा मत् जाओ बुरे मार्ग में। कहा मानो मातापिता का वा गुरु का जो तुम्को भला उपदेश देते हैं। भोर में उठो, और पढ़ने को जाओ, भूलो मत् अपने पाठ को। शिखाओ उन्को जो पाठ को भूलते हैं। ज्ञान पाओगे तब सुखी होगे, अज्ञानी बड़ा दुःख पावते हैं, वा मूर्ख कहलाते हैं। तुम् प्रार्थना करो और आशीर्वाद मांगो परमेश्वर से भली बुद्धि पावने के लिये; क्योंकि उस्की आज्ञा है तुम् मांगो और तुम्को मिलेगा, ऐसा दयावान् वा दाता और कोई नहीं है जैसा ईश्वर है। मत् भूलो कभी ईश्वर को; सदा जानो अपने पास परमेश्वर को, जिसकी दिई आखैं सारे जगत् का है; वह सदा सबको देखता है। अहो मिल लोगो तुम् सब प्रेम के पात्र हो इस् लिये तुम्से मैं प्रार्थना कर्के कहता हूं कि तुम् मत् गवांओ अपने समय को कुमार्ग में फिरके, परन्तु सुखसे बिताओ समय को परमेश्वर की वाट में चलके।

In these lessons we find the English style. Sentences like "मत् कहो कभी बुरी बातैं", "आशीर्वाद मांगो परमेश्वर से" can by no means be called to be of Hindi Style. Here, too, the style of writing is as we generally speak, because words like मत्, करें, तुम्, इस्लिये should have been written like मत, करके, तुम, इसलिये, but the mode of writing follows the pronunciation here, and that, too, in a general way of speaking. Then we find the native words *par-excellence* and deliberate omission of Perso-Arabic element. Words like लगावते, पावने, indicate the Brajbhākhā-Prayog—the style of Lallūjī-Lāl, and this style is not found in modern prose. Words like क्यौंकि, दिई, पावने, etc., are in modern Kharībolī used as क्योंकि, दी, पाने. This system indicates the immature state of Hindi Prose.

The last page, the 16th one, contains the Hindi numerals from one to hundred. This covers the 5th lesson (५ पाठ गिनती का)।

On the whole it can be said that an early stage of modern Hindi Kharī-bolī prose is found in this book. This book, as said above, is for the Hindi-beginners, and the efforts of the Calcutta School-Book Society in publishing such elementary books is surely worthy of note.

News and Views

[A monthly record of News and Views relating to Cultural and Academic Institutions, Events and Movements in India and Abroad.]

Military School at Bihar

It is understood that the Government of India has recently written to the Bihar Government taking exception to the proposal to start a military training school, on the ground that it is a Central subject. It is learnt that the Bihar Government do not accept this view and are proceeding with the plans regarding the school which, it is expected, will be started at Ranchi after the Puja holidays.

As at present proposed the school will train teachers in drill and physical culture, and hence political circles are at a loss to understand why the Government of India object unless it is to the name " military."

Patna University

The Annual Convocation of the Patna University will be held at Patna at 3 p.m. on the 25th November, 1939.

At the invitation of His Excellency the Chancellor, the Hon'ble Khan Bahadur Azizul Huque, C.I.E., Vice-Chancellor of the Calcutta University has agreed to deliver the Convocation address.

Allahabad University Music Conference

The VIII session of the Allahabad University Music Conference will be held at the Senate Hall from November 12th to 14th. The competitions will be held from November 9th to 11th. The competition forms will be available in the Office at the Music Conference, Muir College Buildings, on all working days from August 16th, 1939.

Allahabad University Union

Premier Pant laid the foundation stone of the Allahabad University Union building some weeks ago. Prof. Amarnath Jha, the Vice-Chancellor, welcoming the Premier exhorted the students to follow his example.

Pandit Pant in reply said that University atmosphere should be a source of great training to the students to learn discipline and advised the students to train themselves for the struggle ahead and concluded " equip yourselves to enjoy and maintain Purna Swaraj which we are all trying to attain."

Benares University

It is understood that the Benares University Council appointed Dr. S. S. Bhatnagar, D.SC., Professor of Chemistry and Director of Chemical Laboratories, Lahore, as the Principal of the College of Science, Benares Hindu University, on a salary of Rs. 2,000 per month. To the University it will be a real acquisition to have an eminent scientist of his calibre and

repute, who has done a great deal in promoting research, especially in Applied Chemistry. It is further understood that Dr. Bhatnagar has accepted the offer. Before going to Lahore, Dr. Bhatnagar was serving the Benares Hindu University and has ever since been connected with the University.

Various other appointments were also made in the different departments.

Bombay University

A proposal to nationalise academic robes was recently placed before the Senate of the University of Bombay.

The academic costume to be worn by the members o the Senate and graduates of the University, says the proposal, should be suited to Indian ideas of academic dignity, have national sentiments associated with it and should be prepared of swadeshi cloth in every instance,

If the principle is accepted it is suggested that a committee should be appointed to report on the question.

Other proposa's before the Senate include a motion to consider the advisability and feasibility of introducing Hindustani as a compulsory language for study in the course of studies leading up to graduation in the Faculty of Arts and another recommending the Government to amend the University Act so as to bar the Vice-Chancellor from taking an active part in any election to any University body.

Dacca University Faculty

The Executive Council of the Dacca University at a meeting held recently considered a letter received from the Education Secretary to the Government of Bengal approving the scheme of the proposed Faculty of Agriculture.

The Council decided that the Agricultural Institute at Manipur would be a constituent part of the Faculty which is established with a view to instituting a course of study for awarding a degree in Agriculture.

The Government have decided to sanction an additional grant of Rs. 15,000 annually from 1940-41 towards recurring expenditure for the scheme. They will also pay in the 1940-41 the capital grant of Rs. 25,000 to the University towards the erection and equipment of the required Laboratory.

The Executive Council of the University accepted the recommendation of the Academic Council that whenever more than one candidate would be eligible for a single prize or medal on the result of any examination it should be the duty of the examination committee concerned to select either by *viva voce* or a fresh test or by any other method, one candidate to whom the prize or medal or both as the case might be, should be awarded.

Mass Literacy in Orissa

A meeting of the Provincial Mass Literacy Campaign Committee was held at Cuttack under the chairmanship of the Hon'ble Mr. Bodhram Dube, Education Minister.

The Committee, it is understood, discussed various aspects of the literacy campaign to be carried on in the province and decided to concentrate the campaign at two places, one adjoining the urban area and another in the interior under the direct management of the Committee.

The Committee further decided to supply free of cost charts, books, news-sheets, lamps and such other necessaries to centres started by private individuals or societies.

The Committee also discussed ways and means for attracting the people to the campaign. A provincial literacy officer will be appointed to be in charge of the campaign all over the province, and the committee members will be entitled to supervise the work.

It is understood that the Committee further decided to observe a Mass Literacy Day to popularise the campaign. The date will be fixed later on. The Committee also approved a scheme of library through which books will be supplied to literates.

Basic Education in Meerut

The Basic Education Scheme was inaugurated on the 15th August last in the Sardhana Tagayam Primary School in Meerut district.

Messages wishing the scheme success were received on the occasion from the Governor of the United Provinces, Mahatma Gandhi, Pandit Jawaharlal Nehru, Premier Pandit Pant and the Director of Public Instruction.

International Committee on Intellectual Co-operation

Speaking at the sessions of League of Nations International Committee on Intellectual Co-operation held recently in Geneva, under the chairmanship of Prof. Gilbert Murray, Sir Abdul Quadir referred to the baneful influence which certain methods of teaching history had on students. He stated that India had suffered much from works of this type published in that country.

One of the causes, according to Sir Abdul Quadir, of the difficulties between Hindus and Muslims was the differences between the history books placed at the disposal of these communities. It was indispensable that history text-books should provide an element of reconciliation.

On the subject of students' participation in extra-curricular matters, following M. Paul Valery who stated that the younger generation had a distressing feeling of instability, Sir Abdul Quadir stated that he was impressed by the remarks of an authority like Prof. Gilbert Murray to the effect that students should not lose sight of their studies when taking part in students' gatherings. He thought, however, that there were arguments in favour of such organisations. It was important that they should not concern themselves with political or religious controversies. Nevertheless, his experience of Indian students led him to think that one might encourage the study of politics, but controversy should be avoided as far as possible.

Royal Aeronautical Society

The Indian branch of the Royal Aeronautical Society was formed at Karachi airport at a preliminary meeting convened by Mr. E. W. Densham, Aircraft Inspector, Karachi.

Indian Students at Manchester

Mr. M. K. R. Venkataraman, Hon. Secretary, Manchester Indian Association writes:—

In view of the difficulties experienced by Indians in finding suitable accommodation and proper guidance on their arrival in England, it has

been the policy of the Manchester Indian Association to offer all possible help, advice and guidance to all freshers who come to Manchester for studies and practical training. Students who intend to come to Manchester for the next academic session beginning in October are advised to communicate with Mr. M. K. R. Venkataraman, Hon. Secretary, Manchester Indian Association, c/o College of Technology, Manchester, informing the date and time of their arrival in Manchester either before leaving India or on arrival in London.

Any further information regarding studies, etc., in Manchester will be gladly supplied on request.

P. E. N. Congress in Stockholm

Sophia Wadia, the founder of the India Centre of the International P. E. N. Clubs, will represent India at the Seventeenth International Congress which will be held this year in Stockholm, from the 4th to the 7th of September. The Indian delegate, who has represented the India Centre at two previous Congresses of the P. E. N. Clubs, those held at Barcelona in 19 5 and at Buenos Aires in 1936, has started from Jodhpur on the 27th of August.

It is anticipated that some three hundred leading writers and editors from all parts of the world will enjoy the hospitality of the Swedish Centre, which has planned, among other social functions, a welcome reception at the National Museum on the 3rd of September.

Regular sessions of the Congress will be formally opened on the 4th September at the City Hall. At the Congress Sessions will be discussed several topics of serious interest to literature and to the world of to-day. The International President of the P. E. N. Clubs, Monsieur Jules Romains the famous French novelist, and the International Secretary, Mr. Hermon Ould, will be among those present ; others, who it is hoped, will attend include the former International President, Mr. H. G. Wells, Miss Storm Jameson, President of the English Centre, Herr Thomas Mann, Monsieur Romain Rolland, Monsieur Paul Valery and Signor Benedetto Croce.

In these days of international rivalry and mutual suspicions the P. E. N., with its aim of friendliness among writers everywhere, strikes an encouraging note. P. E. N. Congresses with their record of standing courageously for justice, for peace and for goodwill to all are a real force for good.

The P. E. N. International Congress will meet next year in India on the gracious invitation of H. H. the Maharaja of Mysore.

Studying Weather on Wings

Aeroplane ascents, for recording upper air temperature and humidity, are being made with the co-operation of the Royal Air Force at Karachi, Fort Sandeman, Peshawar, Kohat, Risalpur and Ambala.

A daily aeroplane ascent is made at Karachi and three ascents a week at Fort Sandeman. Last year the Royal Air Force made 313 observations at Peshawar, Kohat and Risalpur and 15 at Ambala. The data obtained are telegraphed to Poona soon after the flights.

A number of meteorological problems affecting aviation are being investigated at Karachi and Quetta. The inversions over Karachi, the structure of the atmosphere over Karachi and Quetta and questions relating to vertical visibility are under study.

Miscellany

FRENCH RURAL PROPERTY THROUGH INDIAN EYES *

It would interest students of land-economics in India to know that rural property is too much parcelled out in France. But according to certain sections of French economic thought it would be unwise to pass judgment hastily and conclude that this state of things is necessarily harmful. Small and medium peasant holdings are obliged to make up for shortage of capital by an undue amount of hand work. But there is nothing to show that the social standing of those subjected to it is any lower on that account or the general economy of the country necessarily more unsound. It is extremely difficult to pronounce a general verdict and it behoves us to review all the different regions of a country one after the other in order to get an accurate idea of the advantages and disadvantages of its system.

Now in order to carry out a complete survey a very sound method is necessary, as well as a large number of reliable co-workers ; it is not a task that can be undertaken frequently even in France. The census taken in 1929 was the first to specify for every *departement* (district) the area or areas in which the parcelling must be considered harmful. The whole of these areas represents approximately 9,721,000 hectares (1 ha. = 2½ acres). With the totals for each *departement* available a reliable comparison can be drawn between the several *departements* as regards the extent of the " harmful " areas. The Charente and the Marne districts are the worst off in this respect. The areas it would be well to bring under fewer owners cover some 420,000 hectares in each of these *departements*. Next come the Somme, the Cote du Nord and the Vienne with 400,000 hectares; then the Hautes-Alpes, the Haute-Marne, the Saone-et-Loire and the Yonne. Be it stated that in 11 *departements* there would be ne such parcels to be thus welded together, *viz.*. the Ardennes, Ariège, Finistère. Lozère, Oise, Hautes-Pyrénées, Pyrénées-Orientales, Sarthe, Seine, Seine-et-Marne and Seine-et-Oise *departements*.

To sum up, it may be observed that for the whole of France the percentage of cultivated land parcelled out to excess amounts to 28% and this is the parcelling it is thought advisable to remedy. But it will readily be seen that in such matters extreme caution is necessary. On the one hand, account must be taken of rural stubbornness, say the French experts in social economy; nor should this necessarily be denounced as unreasonable. The smaller rural holdings where a peasant family grows " a little of everything," as the saying goes, and makes a living thereby are far from being unproductive. The French situation is not without its moral for the Indian economists and sociologists. Furthermore, while, after the World-War which led to such extensive devastation, it may have seemed necessary to rationalize production with a view to greatly intensifying output, there has been a disquieting and widespread overproduction, these last few years, as regards many articles and the marketing difficulties encountered in such cases have been a matter of concern both for governments and producers. Can it be held necessary to grow too much wheat, only to be compelled to use it for making methylated spirits or to feed the cattle ? A national interest is alleged to justify the bringing together of small

[1] A discussion at the " *Antarjatik Banga* " *Parishat* (" International Bengal " Institute).

holdings under the owner, but certain circles believe that a world interest is at stake in connection with overproduction, dumping and the vertical fall of prices. It does seem that scientific cultivation, the wider use of mechanical agricultural implements and the popularisation of fertilisers are bound to lead to an increasingly large output which it is perhaps inadvisable to develop inordinately.

Socio-economic thought in France as indicated here has its practical aspects too. These considerations can but strengthen the liberal case which would leave farmers, small owners and peasants free to manage their own cultivation and direct their enterprises as they choose. There is, of course, a bare possibility that some Minister of Agriculture should proceed *ex-officio*, on the advice of the prefects concerned, to regroup the 9,000,000 hectares in which the 1929 inquiry found the parcelling harmful. But in point of fact, apparently, it is felt preferable to resort to persuasion, and in the long run the farmers themselves may eventually come to recognise in what cases the process of regrouping serves both the country and their own interests. As a rule, *laisser faire* continues to hold the ground among French legislators and *intelligentsia* generally.

The restriction of parcelling is being effected slowly, but it has by no means been abandoned. To the mind of the framer of the law of 1918, the initiative lies chiefly with the groups of private interests constituted into unions and the part of the Administration is chiefly to assist such bodies while itself taking a helpful initiative when required in certain cases. In the main the farmers concerned certainly object to majority constraint, but the *Academie d'Agriculture*, several technicians and a few consecutive *rapporteurs* for the Budget have declared in favour of action to be taken *ex-officio*.

It is not necessary to go into particulars concerning the operations in connection with such regrouping, as conducted by a local body whose business it is to arbitrate any disputes that may arise, to ascertain and endorse the agreement when actually carried out. Suffice it to record the results obtained from 1919 to 1929. The process of regrouping applied in 541 cases, dealt with 218,972 *hectares*—an inconsiderable proportion, in view of the fact that 198,225 of these hectares belong to 4 *departements* only: the Somme (85,107 hectares), the Ardennes (57,606 hectares), the Meurthe-et-Moselle (36,502 hectares) and the Oise (19,000 hectares).

Attention may be called to a sort of individual, as distinct from collective regrouping, and consisting in the exchange of parcels. Such exchanges involved between 1919 and 1929 as many as 916,889 parcels with a total area of 447,955 hectares—or more than twice the area dealt with by the regrouping process during the same period. In the Marne *departement*, 87,850 parcels (29,926 hectares) were thus exchanged; and the same was the case in the Bas-Rhin with 93,789 very small parcels covering an area of 5 266 hectares only.

The most recent figures relating to the process of regrouping are already rather old. Be it noted, however, that the general results show 10 operations completed in 1933, 44 in course of completion at the same period and 19 given up. The Meurthe-et-Moselle *departement* would seem to have displayed the greatest activity in the matter, the relevant figures at that date being 6 operations completed, 18 in course of completion and 19 given up. These figures refer to the operations carried out under the law of November, 1918. To the above should be added the operations effected under the law of March, 1919—bearing upon 7 *departements* (Aisne, Ardennes, Oise, Meurthe-et-Moselle, Meuse, Somme and Morocco) and aggregating 376 completed and 128 unfinished operations.

Altogether, in France to-day the rôle of *étatisme* in land-questions is not to be belittled although *laisser faire* happens still to be the dominant factor in the social mind, as embodied for instance in the *Société d'Economie Politique* of Paris, the oldest Economic Society of the world.

INTERNATIONAL STUDIES AT CHATHAM HOUSE (LONDON)

During the period from January to March, 1939, the Royal Institute of International Affairs, London, held a number of meetings at Chatham House. The topics for discussion are enumerated below (with the names of the principal speakers):

Principal Speaker.	Subject.
Commander S. King-Hall ...	The Defence of the Realm (Meeting for the Older Boys and Girls).
Mr. H. Ramsbotham, O.B.E., M.C., M.P.	Munich and After.
Professor Chang Peng-chun ...	The "Second Phase" in China's Struggle.
Mr. Basil Mathews	The Spiritual and Social Basis of World Community.
Professor Allan G. B. Fisher ...	The German Trade Drive in South-Eastern Europe.
Mr. W. Horsfall Carter ...	Spain: Some Aspect of Dr. Negrin's Regime.
Mr. Harold Butler, C.B. ...	The Labour Problem in the East.
Dr. Frederic Benham ...	The Economic Position of Turkey.
Miss Freya Stark	The Future Development of Southern Arabia.
Dr. Richard Schueller	Organised Economy under Democracy.
Mr. Lionel Curtis	World Order.
General Faucher	Some Recollections of Czecho-Slovakia (in French).
Mr. A. G. Elliot-Smith Mr. Con O'Neill Mr. M. Zvegintzov ...	Recent Impressions of Germany.
Mr. W. V. Emanuel	Afghanistan: Its Place in Central Asian Politics.
Lieut-Colonel Sir Arnold Wilson, K.C.I.E., C.S.I., C.M.G., D.S.O., M.P.	The Suez Canal.
Mr. H. N. Brailsford	Impressions of Tunis and Libya.
The Most Hon. The Marquess of Lothian, C H.	The United States and Europe.
Professor D. N. Binchy ...	Church and State in Italy.
Signor Daniele Varè	The Long View in Foreign Politics in relation to the Mediterranean and Far East.
Professor Vincent Harlow, D.Litt.	The Palestine Conference.
Professor Sir Alfred Zimmern ...	The World Situation.
Captain B. H. Liddell-Hart ...	British Military Power and the International Situation.

A recent publication of the Royal Institute is *Political and Strategic Interests of the United Kingdom: An Outline* by a Chatham House Study Group (London, 1939, 7*s*. 6*d*.). Another equally important work is *South-Eastern Europe: A Political and Economic Survey*. It has been prepared by the Information Department of the Institute in collaboration with the London and Cambridge Economic Service.

BENOY KUMAR SARKAR

THE PRISONER COMMUNITY AS A SOCIAL GROUP

Normal impulses are many times turned to perversions upon being transplanted to an abnormal situation. In a prison, "smut" stories are told that would cause a "professional" dirty story-teller in a college "bull-session" to cry with envy.

Deviations from the conventional sex code are tolerated by the convicts, for perversions are regarded as inevitable. Even if the sex drive is not sati-fied in an abnormal manner, the mental conflicts produced in the individual may be more disturbing than the actual consummation of perversions. Not only may the sex attitudes of inmates be distorted by the prison experience, but the lives of sweethearts and wives may be made miserable after the men graduate from this type of "reformation."

It has long been recognized that our reformatories do not actually reform. Contrary to popular belief, however, old timers have no definite educational policy for the youngsters. Inmates learn new and improved techniques in our prisons, to be sure, but this is more or less an incidental feature of the prisoner community. Conversations in the reformatory are primarily with fellow convicts. As in groups in the outside, talk commonly turns to shop. Each type of convicts describes those varieties of technique with which he is best acquainted. The forger talks of forgery; the embezzler, of stock manipulation; the burglar, of methods for entering homes and stores; the stick-up man, of ways to overcome resistance. Thus many an inmate with a sincere desire to go straight on re-entering society is continually confronted with this kind of conversation. Whether he wishes to or not he assimilates new crime techniques.

The prison community is a social group developed by the outcasts of the larger society. The organization of this community is primarily an economic arrangement devoted to obtaining goods and services denied by the administration. Its entrepreneurs, middlemen, class structure, politicians and social deviates are comprehen-ible in terms of the social situation in which the convicts find themselves The development of conniving, with its code of deception, means that inmates have daily training in traits that make reformation difficult. The prisoner community with its connivings, its perversions, and its exchange of crime techniques re-enforces those behavior tendencies which society wishes to prevent. One cannot expect to break down anti-social habits in an atmosphere that is definitely anti-social.—Professors Norman Hayner and Ellis Ash in the *American Sociological Review* (June, 1939).

BENOY KUMAR SARKAR

THE FOREIGN TRADE OF JAPAN

Today Japan has no cause to worry about the increase of imports, since she cannot have too many commodities, and the import costs may as well be considered as being settled when the goods are actually imported. Import increase in peace-time oftener than not suggests extravagance in

the people's living, whereas at present imports are placed under rigid control, says the *Osaka Mainichi* (Tokyo) for June 24, 1939.

The peace-time import-increase, unless accompanied by an export-increase, frequently gives rise to an adverse rate of the yen on the exchange market, because of the settlement requirements. As things stand today, foreign powers will not sell goods to Japan unless she produces cash.

Importing goods means *ipso facto* that Japan has sufficient cash or is in some other way able satisfactorily to settle her accounts. With some exceptions, most third powers have come to assume an unfriendly attitude toward Japan. Consequently, settlement of the adverse trade balance is not carried forward and the increase of imports demonstrates increasing capacity. The more the imports increase, the more clearly is it shown that Japan's economic potentiality has been strengthened.

The total of the imports up to the middle of June, this year, is Y 1,490,000,000. Compared with the amount for the corresponding period of the previous year, it shows an increase by Y 100,000,000. The amount of the exports is Y 1,480,000,000, this being a phenomenal increase of Y 280,000,000. The balance cuts only 10,000,000 from Y 190,000,000 import excess last year. Judging by the figures, Japan may feel somewhat less anxious about the increase in the imports.

The first difficulty with reference to commodity mobilization lies in the capacity for import. But in this respect, the fact that the nation has managed to increase by Y 100,000,000 in the first six months is being regarded as praiseworthy.

The only question is that concerning exports. In the increased exports, there is considerable amount of export to the yen-bloc nations. If the increase of export in the current year is only an increase to the yen-bloc countries, Japan can hardly be optimistic.

Figures indicating Japan's trade with the yen-bloc states and that with third powers separately are not available. Supposing that the total trade volume of Japan *minus* her trade with Manchoukuo and China is the commerce with the third powers, the trade result during the first five months of this year is fairly favourable, compared with that of the corresponding period of the previous year.

Japan's exports to the yen-bloc states during the first five months of this year showed an increase of about Y 50 million, while those to third powers showed a far greater increase of Y 160 million. Thus the increase of Japan's exports this year is seen in her trade with both the yen-bloc states and the third powers, especially the latter.

Up to the end of March, the exports to the third powers showed a decline. A remarkable increase, however, was seen in April and May. The advance of raw silk price is partly responsible for the larger amount of Japan's exports to the third powers this year, but it is true that the export trade was markedly stagnant during the same period last year.

Japan's foreign trade with the third powers during the first five months of last year resulted in an adverse balance of Y 190 million. The adverse balance this year is only Y 100 million, showing a decrease of Y 90 million and saving foreign payments to that amount.

BENOY KUMAR SARKAR

THE CO-OPERATIVE MOVEMENT IN GERMANY

In January, 1939, there were in Germany (old territory of the Reich) 51,214 co-operative societies of all types. Including the provisional figures

for the extended territory of Germany the co-operative societies were distributed as follows over the various federations and groups:

Federations.	Types of Society.	Number of Societies on January 1, 1939.
German Co-operative Union	Credit Co-operative Societies (urban).	1,951
German Union of Agricultural and Raiffeisen Co-operative Societies.	Credit Co-operative Societies (rural).	20,680
German Co-operative Union	Craftsmen's Traders, etc., Societies,	3,225
German Union of Agricultural and Reiffeisen Co-operative Societies.	Agricultural Sale and Purchase Societies, etc.	25,421
Union of Housing Co-operative Societies.	Housing Co-operative Societies.	3,339
Auditing Union of the Consumers' Co-operative Societies.	Consumers' Co-operative Societies.	1,209
		55,825

In all the above groups, with the exception of the distributive societies, the final or provisional figures for the number of co-operative societies from former Austrian territory are included; in the case of the agricultural credit societies, the agricultural sale and purchase societies and the housing societies the provisional figures for the Sudeten territory are also included.

If account is taken of the societies that are not affiliated to any federation, the total number of individual co-operative societies of all kinds in Germany on January 1, 1939, was approximately 58,000.

In the old territory of the Reich the credit co-operative societies declined in numerical importance as compared with the previous year. The number of societies dissolved was fewer than in 1937, being 286 (of which 254 were savings and loan funds), but there was a further decline in the number of new societies founded, which was only 22 (of which five were industrial).

The number of handicraftsmen's co-operative societies dissolved in 1938 was 59, as compared with 54 new societies. In the case of the supply societies, there was a decline from 270 to 235. Handicraftsmen's co-operative societies are most common in the following occupations: bakers (409), tailors, weavers, furriers, etc. (150), locksmiths, blacksmiths, wheelwrights, instrument-makers, etc. (100), butchers and workers in hides and skins (206), building workmen (180), carpenters and joiners (105).

The number of housing co-operative societies also fell considerably in 1938. There were 16 new societies, as compared with 71 which were dissolved and 3 which went into liquidation. In the case of land settlement societies only one was founded and 32 were dissolved.

The establishment of new societies has ceased entirely in the case of distributive co-operative societies. In this group 17 were dissolved, generally by amalgamation. There were 1,200 distributive societies in all.

The number of agricultural co-operative societies fell off to a very marked extent during the year. The number of new societies was 345, but 656 were dissolved. The decline was particularly marked in the case of dairy and electricity co-operative societies.—*Blätter für Genossenschaftswesen*, Berlin, March 1, 1939.

BENOY KUMAR SARKAR

Reviews and Notices of Books

The Cambridge History of India, Vol. IV—The Mughal Period. Planned by Sir Wolseley Haig. Edited by Sir Richard Burn.

The Fourth Volume of the Cambridge History of India traces the rise and fall of the Mughal Empire and besides political history contains a study of the revenue system and a description of the monuments. There are altogether eighteen chapters. Of these six have been written by Sir Wolseley Haig, four by Sir Jadunath Sarkar, three by Sir Richard Burn, and one each by Sir Dennison Ross, H. G. Rawlinson, W. H. Moreland, G. E. Harvey and Percy Brown.

From its very nature such a work that involves the co-operation of so many scholars cannot but be inorganic but we did not expect it to be so stereotyped. Most of the chapters are mere abridgements of previous works dealing with the subject. The most disappointing of the chapters is on "Akbar—mystic and prophet," which practically accepts all the views of Smith and summarily rejects the views opposed to his. Yet an air of impartiality is sought sedulously to be maintained. We give below a paragraph on the Din Ilahi from Chapter V: "This was not, as one writer has described it, merely 'an association of students and free thinkers who had transcended the barriers of faith and creed and shaken off the tyrannous yoke of agelong customs.' It was a new sect. This was certainly as Dr. Smith described it 'the outcome of ridiculous vanity, a monstrous growth of unrestrained autocracy' but we must not lose sight of the object which was to make all his subjects one people. The object was noble but the means adopted for attaining it absurd." V. Smith's attempt to find fault with Akbar because of his 'earth hunger' is repeated. We read, "His life's record is smirched with one dark blot. His 'earth hunger' was insatiable and he sometimes displayed duplicity." But has Imperialism, whether Eastern or Western, ever been free from the vice of 'earth hunger' and has not duplicity always played a remarkable part in its programme of aggression? How a scholar can go out of his way to fling mud is very well illustrated on page 102, where we read "Shaikh Salim, though described by Father Monserrate as 'being stained with all the wickedness and disgraceful conduct of the Muslims'—a phrase of sinister import—had great reputation for sanctity among his co-religionists."

The plan of the work has some features that are open to grave objection. There is a chapter on the revenue system, written no doubt by the most competent authority on the subject, but there are none relating to the Mughal administrative system. This negative attitude cannot satisfy any serious student of Indian History. Ibn Hasan's book dealing with the central structure of the Mughal machinery of government shows how systematic this study can be.

This Cambridge History is calculated to convey the impression that in Mughal India we find only court intrigues and palace revolutions, only 'the wild and dreamlike trade of blood and guile.' The topic of good governance is something that is irrelevant. We also look in vain for a freshness of outlook. Are we not justified in finding fault with a plan which gives us a careful account of the doings of the Jesuit missions and their influence, religious and educational, without even the show of an

attempt to give us a helpful study of the cultural relations of India with Iran and Turan, her neighbours, that furnished the Mughal Empire with great philosophers, beautiful princesses, brave generals and able politicians and statesmen ? Inaccuracies in detail are by no means rare and we think that with the exception of Chapters XIII, XVI, XVII, XVIII, the volume cannot be of much use to any advanced student of Indian History.

I. BANERJEE.

Elements of Indian Company Law. Third Edition. By Sohrab R. Davar, Barrister-at-Law. Butterworth.

Mr. Davar is well-known as a writer of books on Mercantile Law, and his ability and experience have received recognition by his inclusion as a member in the Committee appointed by the Government of India for Companies Act Amendment, 1936. Owing to some of the drastic amendments made by the Amendment Act of 1936, a clear and connected statement of the law as it stands, compared with the law it replaces, has been rendered somewhat difficult, but Mr. Davar has made ample use of his opportunities to present a lucid analysis of the amended law, which makes the present edition of the book very helpful for the students of the Indian Universities, for whom it is primarily intended. The main characteristic of Mr. Davar's book is the practical application of the law, which is always kept before the reader's eye, and, accordingly, those who have to deal, in actual practice, with the many problems of the Indian Company Law will also find the book very useful for reference. The style of the book is attractive, and the get-up excellent.

SURES C. CHAKRAVARTI

Ernest Mackay: *Die Induskultur*. Firma Brockhaus, Leipzig, 1938. Reichsmarks 3.80.

Mackay's work entitled *The Indus Civilization* (London, 1935) is well known in India. His newly published *Further Excavations at Mohenjo-daro* (1938) is a sequel to the three volumes edited by Marshall under the title *Mohenjo-daro and the Indus Civilisation* (1931), the first systematic account of the excavations issued by the Archaeological Survey of India.

It is interesting to observe that Mackay's study of 1935, which may be said to be a short but comprehensive introduction to the entire Mohenjodarian antiquities, has been rendered into German by Dr. Max Mueller of Iserlohn. The work before us embodies this translation as rendered available by the distinguished publishers, Firma Brockhaus of Leipzig. The translator has attempted to preserve the lucidity of the original and the publishers have enriched the book with fine illustrations, 78 in number, and a map.

B. K. SARKAR

A Modern School Chemistry, by A. J. Mee. Published by J. M. Dent & Sons, Ltd.

The book embodies simpler treatment of some non-metals and metallic elements. The portion dealing with non-metals embodies a more elaborate treatment. The metallic portion is rather brief and does not give much information regarding such important metals as Aluminium, Magnesium, Copper, etc.

It is, however, a nice little book for the beginners. The presentation of the subject matter is so simple and the treatment is so attractive, that the book will prove to be very useful to those who want to learn Chemistry by themselves. A book of this type can be very safely recommended for the use of school children. I am sure it will be very much appreciated by the students taking up Chemistry in the new Matriculation Examination of our University. It is unfortunate that it cannot be recommended as a text-book for I.Sc. Examination of our University, as it falls short of the prescribed syllabus. I would not, however, hesitale to recommend it to the students of I.Sc. classes who will do well to give it a preliminary reading, which will help them immensely in learning Chemistry.

M. Q. KHUDA

Elementary Inorganic Chemistry, by S. J. Smith. Published by the Macmillan & Co., Ltd.

The book contains a preliminary treatment of some of the simpler elements. The theoretical aspects of Chemistry has been dealt with in the most elementary way, thus making it quite useful for the beginners. The metallic portion and some of the non-metals also require more elaborate treatment, in order to make it useful for the Intermediate students. The book cannot therefore be prescribed for the Intermediate Examination of our University.

It can, however, be recommended for use in Matriculation classes, where it is expected that the readers will derive some benefit by its use.

On the whole it is a fairly good book and will be useful to all who want to know something of Chemistry within a short time.

M. Q. KHUDA

Bankim Chandra: Prophet of the Indian Renaissance: His Life and Art, by Sj. Matilal Das. Published by G. Majumdar, D. M. Library, 42, Cornwallis Street, Calcutta, 1938. Price Rs. 2-8-0; pp. 1-189.

A " tribute and homage " to Bankim Chandra on the occasion of the centenary, the book seeks to speak on various aspects of Bankim and his writings—and certainly there is scope for a handy, readable book on the subject written in English. The author's contribution to the literature on Bankim should be taken in that light. The significance of the great novelist both in the spheres of art and propaganda has been studied in the book and lovers of Bankim will enjoy its perusal, and we hope to see in its next edition most of the errors rectified.

When we compare our great men, the need of caution should be always felt and admitted by us. The writer has not, at least on one occasion, shown the proper amount of caution. In view of the importance of the matter at issue, the passage in question (p. 185) is reproduced below:—

" Rabindranath is subtle and mystic but he has no touch with the work-a-day world. Vivekananda is too much philosophical and is pre-occupied with religion in its narrow sense. Bankim Chandra was a man of the world. He accepted the Gospel of Hinduism in their (*sic*) loftiest and truest teachings and put them to use in the imaginary situation of the world of fiction. It is, therefore, easier for the foreigner to understand and appreciate the glorious teachings of Hinduism in the pages of Bankim Chandra."

Certainly Bankim Chandra is great, without any invidious reference to Tagore or Vivekananda.

P. R. SEN

Ourselves

[I. Asutosh Museum of Indian Art, Calcutta University.—II. Ghose Travelling Fellowship for 1939.—III. Amendment of the University Regulations.—IV. Appointment of Departmental Heads —V. Chittagong College —VI. Cotton College. Gauhati.—VII. Indian Economic Association —VIII. A New D.Sc.—IX. Dates for Examinations to be held in 1940.—X. Sir Asutosh Mookerjee Medal for 1938.—XI. Financial Aid for "A Vedic Concordance and Encyclopaedia." —XII. Excavation at Bangarh.]

I. Asutosh Museum of Indian Art, Calcutta University

The Asutosh Museum established by Dr. Syamaprasad Mookerjee in April, 1937, primarily as a home for specimens of the Bengal School of Art has within less than two and half years of its existence acquired either by purchase or free gift a treasure of art and architecture whose significance may well be pronounced to be unique in the interpretation of India's culture and civilisation. The specimens which have already been collected represent practically every phase of Indian Art from pre-historic times until the present day. It was only a few months ago that we announced in the pages of this journal the gift of the Nahar Collection to the Asutosh Museum, consisting mostly of Rajput Painting and Architecture. The University has just acquired the private collection of Mr. Birendranath Roy of Puri, bears, a collection which testimony to Mr. Roy's labours extending over a period of twenty years as an amateur archaeologist. It contains well over 1,500 specimens, some of which are unique for their antiquarian and artistic interests. Of the more important objects belonging to the Collection, mention should be made of 300 stone sculptures including specimens of Buddhist art going back to the pre-Christian era as well as many beautiful carvings in which one may trace the growth of the Orissan art and its decadance. There are 250 manuscripts on literature, philosophy, religion, architecture, etc., written in Sanskrit, Bengali, Oriya, and Telugu, the most conspicuous of which is a brilliantly illustrated Ramayana containing not less than 200 drawings on palm leaves. Among the other principal attractions of the Roy Collection 200 pieces of painting executed on cloth and on wood covers for manuscripts, 700 coins dating back to ancient and medieval times, and 200 bronze and ivory figures showing wonderful workmanship. There are a few modern

specimens too, particularly the representations in miniature of the Jagannatha and Bhuvaneswar temples made on wood and stone which give evidence of the great skill possessed by the Oriya artist of to-day.

* * *

II. Ghose Travelling Fellowship for 1939

The Ghose Travelling Fellowship in Arts for the year 1939 has been awarded to Mr. Jitendranath Banerjee, M.A. He will join the School of Oriental Studies, London, for investigating the "Early History of the Brahmanical Sects in relation to Archaeology (from the 4th century B. C. to the beginning of the Muhammadan invasions of India)." Mr. Banerjee will conduct his studies mainly at the British Museum Library where books on this subject are available.

The Ghose Travelling Fellowship in Science for the year 1939 has been awarded to Dr. Mahendranath Goswami, Dr.es.Sc., and Dr. Purnachandra Mahanti, D.Sc. Dr. Goswami will make a special study of Plastics visiting in this connexion the Plastic Institutes and Factories in the United Kingdom and Germany. Dr. Mahanti will work in England and U.S.A. on the latest methods of standardisation of electrical instruments, clinical thermometers, etc., and on the testing and manufacture of electrical instruments, specially House Service meters.

Two additional Ghose Travelling Fellowships of the value of Rs. 2,200 each have been awarded to Mr. Mohammad Ishaque, M.A., B.Sc. and Mr. Susilkumar Basu, M.Sc., M.B., D.P.H., D.T.M. Mr. Ishaque has been writing a work on the "Poets and Poetry of Modern Persia" since about a year and is now attached to the School of Oriental Studies, London. Mr. Basu will make a comparative study of the "Growth in Length of Limb Bones with special reference to the Union Epiphyses." He is now working on this subject with Professor J. C. Brash at the University of Edinburgh and will afterwards proceed to America to complete his investigation.

* * *

III. Amendment of the University Regulations

[Chapter XXXII—I.A.]

The University has decided, subject to the final approval of Government, not to allow a student to take up Bengali, Hindi, Assamese,

or Urdu in lieu of a Classical Language at the Intermediate Examination in Arts, unless he has passed the Matriculation Examination in a Classical Language. Such a student shall be examined in a Special Paper in the Classical Language in which he has passed the Matriculation Examination in lieu of the paper in Vernacular.

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IV. Appointment of Departmental Heads

The following Professors have been appointed Heads of Departments stated against their names for a period of three years :—

Prof.	Meghnad Saha, D.Sc., F.R.S. ...	Physics, with effect from July 1, 1939.
,,	Phanindranath Ghose, M.A., Ph.D., Sc.D., F.Inst.P.	Applied Physics, with effect from June 1, 1939.
,,	Praphullachandra Mitter, M.A., Ph.D.	Chemistry, with effect from June 1, 1939.
,,	Bireschandra Guha, D.Sc., Ph.D.	Applied Chemistry, with effect from June 1, 1939.
,,	S. P. Agharkar, M.A., Ph.D., F.L.S.	Botany, with effect from June 1, 1939.
,,	Nikhilranjan Sen, D.Sc., Ph.D.	Applied Mathematics, with effect from June 1, 1939.

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V. Chittagong College

The Chittagong College, Chittagong, has been granted extension of affiliation to this University in Political Economy and Political Philosophy to the B.A. Honours standard with effect from the commencement of the session 1939-40.

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VI. Cotton College, Gauhati

The Cotton College, Gauhati, has been granted extension of affiliation to this University in Assamese as Second Language for women students only to the I.A. standard from the commencement of the session 1939-1940.

* * *

VII. Indian Economic Association

The Twenty-third Annual Conference of the Indian Economic Association will be held at Allahabad under the auspices of the Allahabad University from the 29th to the 31st December, 1939.

* * *

VIII. A New D.Sc.

Mr. Kshitischandra Bhattacharyya, M.Sc., has been admitted to the Degree of Doctor of Science on the strength of a thesis entitled "An Examination of the Question of Strain on Mono-Cyclic Rings" which was examined by a Board consisting of Professor R. Cornubert, Sir Gilbert T. Morgan and Sir W. J. Pope.

We offer our congratulations to Dr Bhattacharyya on his success.

* * *

IX. Dates for Examinations to be held in 1940

The dates for the following examinations have been fixed as follows:—

Matriculation	...	Monday, the 11th March, 1940
I.A. and I.Sc.	...	Thursday, the 8th February, 1940
B.A. and B.Sc.	...	Tuesday, the 19th March, 1940
L.T. and B.T.	...	Monday, the 15th April, 1940

Detailed programme will be published later.

* * *

X. Sir Asutosh Mookerjee Medal for 1938

The Sir Asutosh Mookerjee Medal for 1938 has been awarded to Dr. Amarprasad Dasgupta, M.A., PH.D., who was formerly a Post-Graduate Lecturer in the Department of History and is now the Assistant Controller of Examinations of our University. Dr. Dasgupta submitted a thesis entitled "Studies in the History of the British in India." We congratulate Dr. Dasgupta on his new honour and also on the fact that he has found time to pursue his academic interests in spite of heavy official duties.

* * *

XI. Financial Aid for "A Vedic Concordance and Encyclopaedia"

Our University has promised financial aid to the Vishveshvaranand Vedic Research Institute, Lahore, in preparing "A Vedic Concordance and Encyclopaedia," to the extent of Rs. 250 annually for four years provided satisfactory progress is made in the work.

* * *

XII. Excavation at Bangarh

It may be recalled that a scheme of archaeological excavation was prepared in 1937 under the direction of Dr. S. P. Mookerjee, the then Vice-Chancellor of this University. Subsequently a great opportunity was offered by the modification of the "Ancient Monuments Preservation Act" of the Government of India enabling Universities and other learned Societies to participate in excavation and our University was the first in India to avail itself of the opportunity. During the winter of 1937-38, this University sent a batch of students and research workers under the supervision of Mr. Kunjagobinda Goswami, M.A. to Bangarh in the district of Dinajpur where excavation work was started forthwith. The work was carried on for four weeks and the results obtained were very promising. The excavation was continued for about three months at the same site in the following year (1938-39) and the area exposed was about 34500 sq. ft. as against 10300 sq. ft. of the previous year. The following extract from the preliminary report forwarded by Mr. Goswami is worth reading:

"The excavation has proved more promising and encouraging both in the find of structural remains and discovery of portable antiquities. Brick structures of at least three distinct strata belonging to different periods of early history of Bengal have been exposed. There have been found remains of several houses with stone pillar bases *in situ*. Of these a brick-built hollow structure of the shape of a conventional lotus with sixteen petals is interesting. Within this lotus again a little down below an octagonal hollow structure with brick floor has been unearthed. This octagon contains a pottery pipe of $3\frac{1}{2}$ inches in diameter at one of its sides. This drain passes through below the floor of one of the four corner rooms (Southern one) and discharges

itself into a circular pit at a lower level outside the main wall of the house. It has also been found out that this cess-pit had an outlet. A lotus-shaped structure together with such associated objects is not known to have been found elsewhere. It is really a rare discovery. A masonry well of the third stratum is also remarkable. Its existing top is found just below the foundation of a massive wall of the second stratum. Some pavements built of bricks on edge are also interesting. Mud was used here as mortar in the structures of the lower level, while traces of lime and sand in plaster are also available in the walls of the upper level.

As regards the minor antiquities the excavation was amply rewarded. Evidence of the art of ancient Bengal was discovered in the shape of terra-cotta objects, decorative bricks and architectural stone pieces. Of these, the terra-cotta objects throw sufficient light on a considerable length of time. For instance, these objects show the characteristics resembling those of the Sunga, Kushan, Gupta and Pala periods. Two clay sealings, and two fragments of a gold amulet (?) bearing Brahmi characters resembling those of Early Gupta (?) period are also illuminating. Three punch-marked coins (two silver and one copper) are also noteworthy.

Of the stone objects, namely pillars, pillar bases (double coursed) *amalaka* and door-jamb, the last mentioned one is very remarkable. It contains three columns of decoration on each of the two sides. The decoration contains figures, foliage and flower. It was removed from its original place and was placed at a later time to serve the purpose of a door-sill after mutilating a part of the decoration on one side.

There have been found other interesting objects also which will be dealt with in details later on

On the whole the site appears to be very promising. As the area is vast, it will take a number of years to reveal the buried remains and it is reasonably hoped that further excavation here (at Bangarh) is likely to open an illuminating chapter in the obscure history of Ancient Bengal."

NOTIFICATION

I

BENARES HINDU UNIVERSITY

NOTICE

The subject for Swami Sri Madhusudanananda Saraswati of Matar Shanker Vedant Prize for the year 1939-40 is:—

The Place of Intuition in Indian Philosophy

The Shanker Vedant Prize of Swami Sri Madhusudanananda Saraswati of Matar of the value of Rs. 150 will be awarded to a graduate of not more than five years' standing of the Benares Hindu University who has taken the degree of Dharmashastri of the said University and writes the best essay in Hindi or Gujrati on *The Place of Intuition in Indian Philosophy.*

The essay must be sent in a sealed and registered cover so as to reach the REGISTRAR on or before the 31st January, 1940. Each essay is to have some motto prefixed to it and is to be accompanied with a sealed cover containing the candidate's name and full address and bearing the same motto outside. No part of the essay should contain the name of the candidate.

The Prize shall not be awarded unless the judges pronounce the essay worthy of it.

BENARES:
The 1st of July, 1939.

G. P. MEHTA, M.A.,
Registrar.

II

Competition for the "Chandulal Chotalal Mehta Prize." The subject chosen for the year 1941 is:—

The Population and Production in India

Extracts from the Rules

1. A prize called *Chandulal Chotalal Mehta Prize* consisting of the interest on Rs. 5,000 for one year or of books of the like value to be selected by the winner, shall be awarded for the best essay on the subject noted above.

2. Competitors shall be graduates of the Benares Hindu University of not more than seven years' standing from the date of the graduation.

The essay must be sent to the REGISTRAR on or before fourth Monday in July, 1941. Each essay shall be designated by a motto instead of the writer's name and shall be accompanied by a sealed cover containing the name of the competitor, his university standing, full address and a declaration that the essay is *bona-fide* his own composition.

4. The prize shall not be awarded for an essay which, in the opinion of the judges, does not show research or originality of treatment.

5. The essay shall be the property of the University which may print or publish it. The writer of the essay must obtain the previous permission of the Syndicate if he wishes to get it printed himself.

BENARES: G. P. MEHTA, M.A.,
The 1st of July, 1939. *Registrar.*

III

The Subject for the Narsingh Prasad Hari Prasad Buch Metaphysics Prize for the year 1939-40 is:—

The Concept of Moksha in the Shanker School of Vedanta

The Narsingh Prasad Hari Prasad Buch Metaphysics Prize of the value of Rs. 200 will be awarded to an Indian who writes the best thesis in English or Hindi on *The Concept of Moksha in the Shanker School of Vedanta.* The thesis must bear a suitable motto and must be sent to the REGISTRAR in a sealed and registered cover on or before the 31st of January, 1940, with a declaration that it is *bona-fide* the competitor's own composition, and also an affidavit countersigned by a local Judicial Officer or by the Principal of the College with which the competitor has been connected in the past to the effect that he is a strict teetotaler and vegetarian. No part of the thesis should contain the name of the competitor.

The Prize shall not be awarded unless the judges pronounce the thesis worthy of it.

BENARES: G. P. MEHTA, M.A.,
The 1st of July, 1939. *Registrar.*